

Annexe 25 du rapport d'évaluation

SET ASIDE COMUNITARY MESURES EVALUATION

NATIONAL REPORT

Spain



**DEPARTAMENTO DE PROYECTOS Y
PLANIFICACIÓN RURAL
ESCUELA TÉCNICA SUPERIOR DE
INGENIEROS AGRÓNOMOS
UNIVERSIDAD POLITÉCNICA DE MADRID**



GENERAL INDEX

1. INTRODUCTION.....	6
1.1. Contents of the document.....	6
1.2. Evaluation Methodology	6
2. THE POSITION OF COP PRODUCTS IN THE NATIONAL AGRICULTURAL CONTEXT	8
2.1. Percentage of agricultural area in Spain	8
2.2. Final agricultural production	8
2.3. Position of COP products in the period 1985 – 1999	8
2.4. Evolution of the area of Fallow land	10
3. CONTEXT OF THE IMPLEMENTATION OF LAND SET-ASIDE	11
3.1. Data on the implementation of land set-aside	11
3.2. Characteristics of the Plan of Regionalisation. Spain.....	12
4. LEGAL SCENARIO OF THE IMPLEMENTATION OF SET-ASIDE.....	14
4.1. Organisation of the implementation, monitoring and control of PAC and set- aside surfaces.....	14
4.2. National Legislation	15
4.2.1. Period 1991-1992 . Regulation prior to Regulation (EEC) 1765/92 of the Council.....	15
4.2.2. Period 1992-1997 . Regulation prior to Regulation (EEC) 1765/92 of the Council.....	15
4.3. Texts from national legislation referring to the environment in the context of land set-aside.....	17
4.4. Relative to traditional white fallow.	17
5. NATIONAL SYNTHESIS OF THE STUDY	19
5.1. Answer to questions 431- 444.....	19
5.1.1. Question 4.3.1:.....	19
5.1.2. Question 4.3.2:.....	20
5.1.3. Question 4.3.3:.....	20
5.1.4. Question 4.3.4:.....	21
5.2. Answer to questions 441- 444.....	23
5.2.1. Comparative answer (criteria at regional level).....	23
5.2.1.1. Question 4.4.1:.....	23
5.2.1.2. Question 4.4.2:.....	24
5.2.1.3. Question 4.4.3:.....	25
5.2.1.4. Question 4.4.4:.....	25
5.2.2. Answer at national level (criteria at national level)	26
5.2.2.1. Question 4.4.1 – 4.4.4.....	26
5.3. Answer to questions 451 and 452. Complexity of regulation and its setting in place.....	27
5.3.1. Question 4.5.2:.....	27
5.3.2. Question 4.5.2:.....	28
6. UNEXPECTED EFFECT OF SET ASIDE.....	29
8. ANEX.....	Erreur ! Signet non défini.

- 8.1. ANNEXE 1. LIST OF INTERVIEWED MANAGERS AND EXPERTS Erreur ! Signet non défini.
- 8.2. ANNEXE 2. LOCATION OF STUDY REGIONS IN SPAINErreur ! Signet non défini.
- 8.3. ANNEXE 3 SPANISH REGIONALIZATION PLAN.....Erreur ! Signet non défini.
- 8.4. ANNEXE 4: LOST OF COP SURFACE FROM 1985 TO 1999 Erreur ! Signet non défini.
- 8.5. ANNEXE 5: SCRIPT FOR INTERVIEWS OF ADMINISTRATORS AND EXPERTSErreur ! Signet non défini.
- 8.6. ANNEX 6: FREEDOM OF ACTION GRANTED TO THE MEMBER STATE BY COMMUNITY REGULATION ON SET-ASIDEErreur ! Signet non défini.
- 8.7. ANEXO 7. BIBLIOGRAPHY AND REFERENCES (*)......Erreur ! Signet non défini.

FIGURES INDEX.

<i>Evaluation methodology diagram.....</i>	<i>7</i>
<i>Figure 2 Final agricultural production distribution 1992 and 1993.....</i>	<i>8</i>
<i>Figure 3 Evolution of land (has). Cereals, Oleaginous and Proteaginous Crops Spain 1985 - 1999.....</i>	<i>9</i>
<i>Evolution of production (has). Cereals, Oleaginous and Proteaginous Crops Spain 1985 – 1999.</i>	<i>9</i>
<i>Evolution of non-food farming surface and comparison with the ratio of compulsory set-aside.....</i>	<i>10</i>
<i>Figure 6 Evolution of fallow land and other unoccupied lands.....</i>	<i>10</i>
<i>Figure 7 Evolution of COP yields (t/ha) Spain.</i>	<i>21</i>
<i>Figure 8 Cereals surface evolution by type of holdings and holding medium size evolution.</i>	<i>22</i>
<i>Figure 9 Labour land prices evolution. Spain.....</i>	<i>23</i>
<i>Figure 10 Use of nitrogenous fertilizers (t of N) Spain</i>	<i>24</i>
<i>Figure 11 Evolution of COP area and base area (ha) Spain. Source : report authors.</i>	<i>28</i>

TABLES INDEX.

<i>Table 1 Participation of the Cereals Sector in Final Agricultural Production.....</i>	<i>8</i>
<i>Table 2 Analysis of Spanish balances.....</i>	<i>9</i>
<i>Table 3 Data on the implementation of land set-aside Spain. Non-irrigated Land.....</i>	<i>11</i>
<i>Table 4 Data on the implementation of land set-aside in Spain. Irrigated Land.....</i>	<i>11</i>
<i>Table 5 Base Area Spain(has).....</i>	<i>13</i>
<i>Table 6 Set aside regulation previous to the McSharry reform.....</i>	<i>15</i>
<i>Table 7 No food production surface in Spain (has) by regions.....</i>	<i>19</i>
<i>Table 8 Location of set aside lands at surveyed holdings.....</i>	<i>20</i>
<i>Table 9 Units of macronutrients used by hectares (FAO , 1988)</i>	<i>24</i>
<i>Table 10 Main administrative problems detected.....</i>	<i>28</i>

1. INTRODUCTION

1.1. Contents of the document

This report represents the Spanish portion of the work on Evaluation of the impact of community measures relative to the set-aside of lands. The work consists of five documents: four regional reports, and this national report.

The **regional reports** refer to the Autonomous Communities of Castilla y León, Castilla La Mancha, Aragón and Extremadura. These four regions represent over 70% of the National COP area. A map showing the location of the four regions is included in annex 2 of the national report.

The **national report** summarises the four regional reports and includes additional national data.

In the last chapter of this report a series of general recommendations are given within the context of land set-aside measures. These are conclusions the evaluation team has reached while conducting research.

1.2. Evaluation Methodology

The **methodology** used to conduct this evaluation is based on:

- 1 The terms of reference defined by the European Commission – DG VI, for the evaluation.
- 2 The guidelines established by Oreade – Breche, the company that has championed the project. This document is intended for integration in a final document at the community level, and therefore must follow a methodology common to all the European regions evaluated.
- 3 The participative evaluation method developed by the Department of Projects and Rural Planning of the Polytechnic University of Madrid.

Using these three tools a method has been developed for the evaluation of three complementary bases of information:

- A **quantitative** base, resorting to primary sources of information. The following information has been consulted:
 - Databases and statistical series published by official organisms, principally: Ministry of Agriculture, Fishing and Alimentation (MAPA), The Spanish Agricultural Guarantee Fund (FEGA) and the National Institute of Statistics (INE).
 - Official publications consisting of reports, studies and statistics on both the regional and national levels.
- A descriptive or **qualitative** base obtained through a process of participation, directed mainly at two groups:
 - Producers Survey¹: the same survey has been conducted in all the community regions included in the evaluation, directed at a sample of farmers within each region.
 - Interviews of administrators and experts²: During the process of participation interviews and round tables have been conducted with: administrators on the national (central government) and regional (Autonomous Communities) levels; expert researchers in the field of agriculture who belong to different organisms, and representatives of farmers associations. Key informers and the organisms to which they belong appear in the annex titled “list of people contacted” included in each of the regional reports and in the national report.

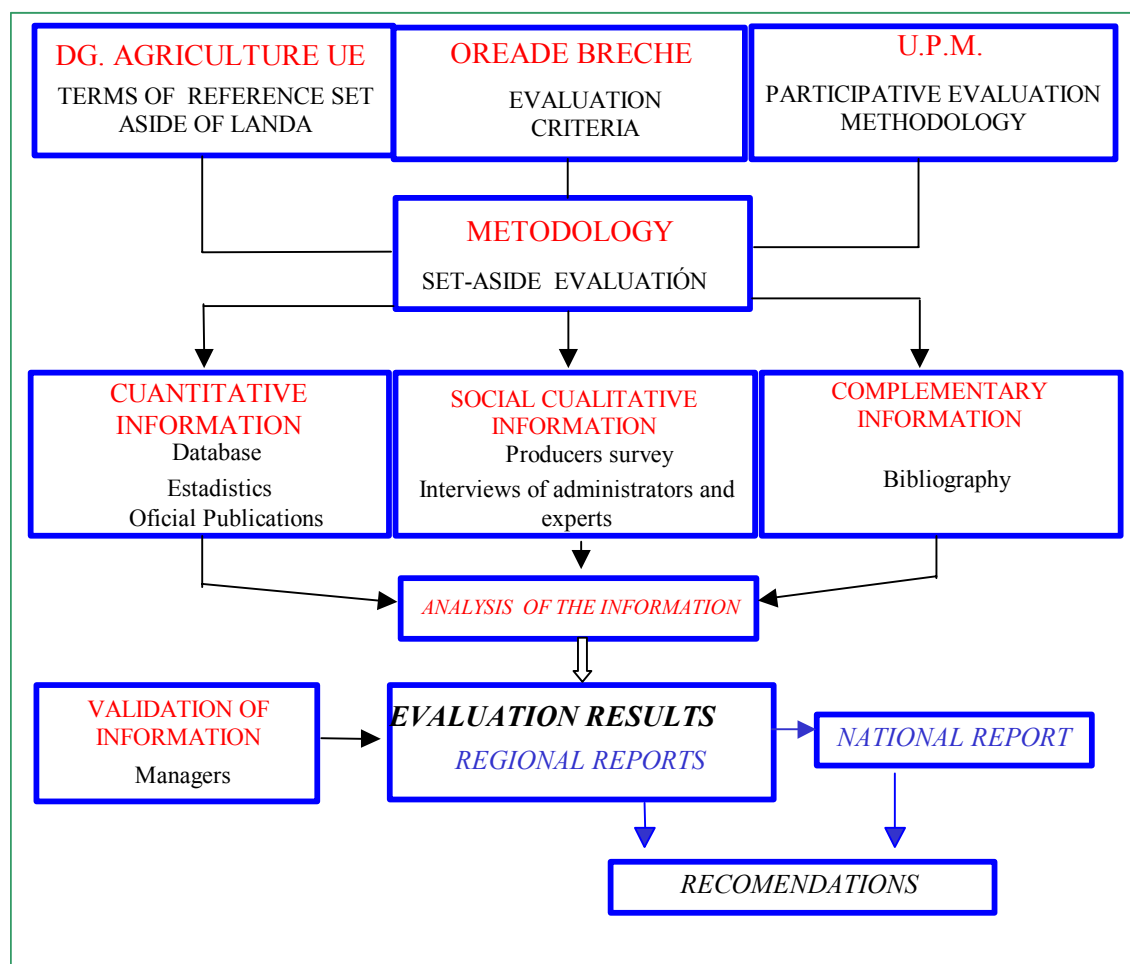
¹ VID Regional reports Annex 6, survey results

² VID Survey of administrators and experts (Annex 5), list of people contacted (Annex 1 to the national report and Annex 4 to regional reports)

- A **complementary** base: bibliographic summary: (research conducted, analyses and articles) which have represented a third source of information to provide answers to the questions of evaluation. The bibliography used appears in an annex to the National Report.

The entire process described above has been carried out using the following methodological system:

Figure 1 Evaluation methodology diagram



2. THE POSITION OF COP PRODUCTS IN THE NATIONAL AGRICULTURAL CONTEXT

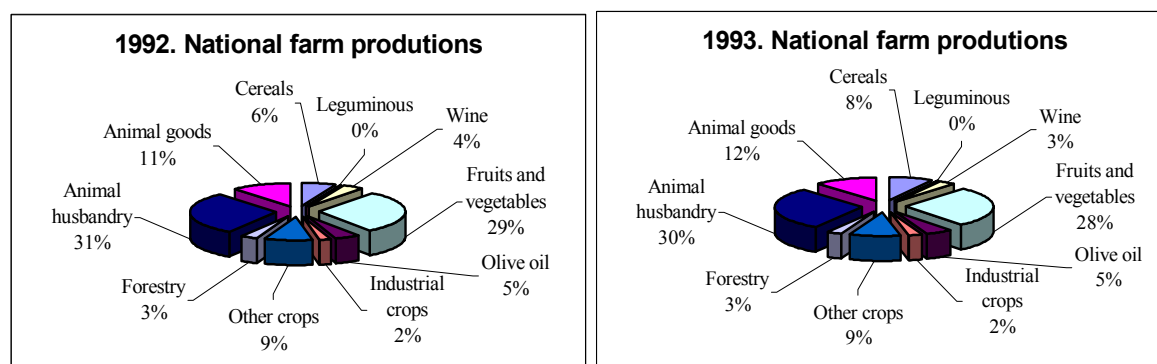
2.1. Percentage of agricultural area in Spain

Spain occupies a territory of 50,500,000 has. of which approximately 40% is farm land (SAU). At the time the reform was initiated, 75% of this area (SAU) was arable land and nearly 9 million has. were occupied by COP products.

2.2. Final agricultural production

If we look at years 1992 and 1993, before and after the reform (Figure 2) we see that the proportion of cereals within final agricultural production increased from 6% in 1992 to 8% in 1993.

Figure 2 Final agricultural production distribution 1992 and 1993



Source: MAPA.

A study conducted by the Directorate-General of Agriculture of MAPA in October 2000 analyses in greater detail the participation of cereals in final agricultural production, as shown in the following chart. To avoid the effect of seasonal situations deriving from weather conditions in a given year, a three year average has been given.

Table 1 Participation of the Cereals Sector in Final Agricultural Production

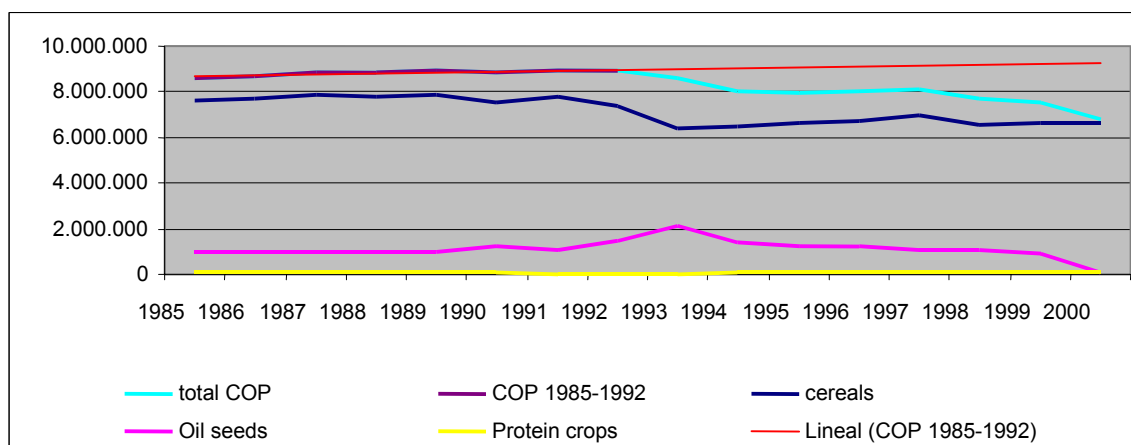
Periods	Years	Millions of Euros			% Cereals / Final production	%Cereals / agricultural sector
		Final production	Agricultural sector			
			Total	Cereals		
Period 1975	1975/76/77	6402	3535	480	7,50	13,59
Period 1985	1985/86/87	16813	9520	2033	12'09	21'36
Period 1995	1995/96/97	24704	14294	1952	7'90	13'66
Umbral 2000	1997/98/99	26399	15566	2097	7'94	13'46

Flores Redondo (MAPA) 2000

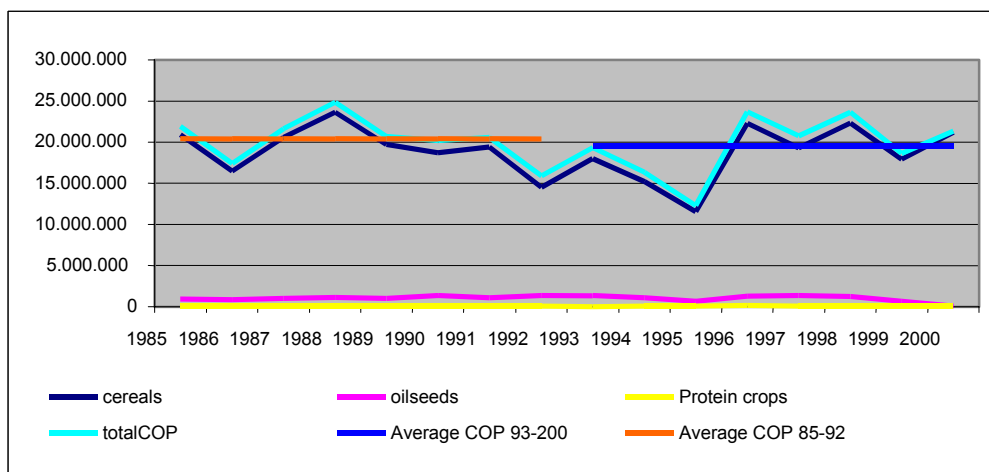
The percentages of participation remain virtually unchanged since the seventies, i.e., the cereals sector has grown in parallel with final agricultural production. Data for the three-year period of 1985-87 must be considered extraordinary because of the record cereal harvests achieved in 1985 and 1987.

2.3. Position of COP products in the period 1985 – 1999

Figure 2 and Figure 3 show the evolution of COP area and production (by groups of crops) respectively in Spain. Cereals represent 85% of COP surface and 94% of production. Data are given in annex 3.

Figure 3 Evolution of land (has). Cereals, Oleaginous and Proteaginous Crops Spain 1985 -1999

Source: MAPA.

Figure 4 Evolution of production (has). Cereals, Oleaginous and Proteaginous Crops Spain 1985 –1999.

Source: MAPA.

COP crops occupied at the beginning of the sixties an area of 7.5 million has. a figure which increased gradually to 8.7 million in the early nineties at which time, following the PAC reform in 1993, they decreased to 7 million as a result of the implementation of compulsory and voluntary set-aside .

The production graph (Figure 4)shows that production trends in the second part of the period (93-99) are less regular than in the first part (85-92). Considering the behaviour of the different cereals and taking 100 as the average of the two central years under consideration, 90/91 and 91/92, gives us the result of the following chart.

Table 2 Analysis of Spanish balances.

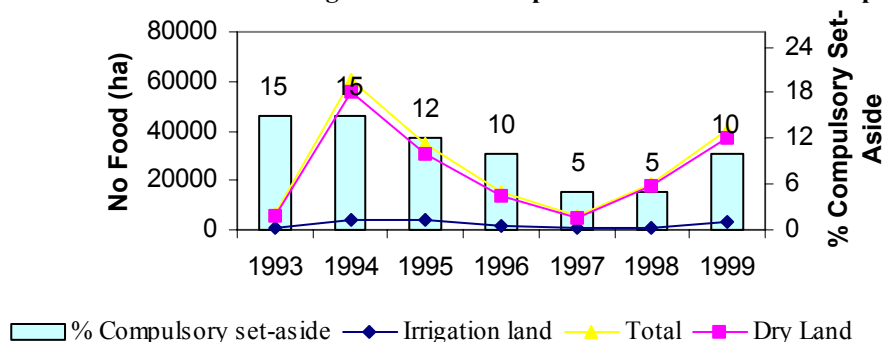
	Total	Trigo	Cebada	Maiz
1985/86	110,7	157,8	114,7	108,8
1986/87	86,4	128,3	80,0	109,0
1987/88	109,1	163,2	105,5	113,3
1988/89	125,0	184,1	120,7	114,0
1989/90	104,4	161,3	100,7	106,0
Media 90/91-91/92	100 (18524)	100 (5119)	100 (9326)	100 (3136)
1992/93	75,2	214	65,4	87,8
1993/94	92,5	184,4	104,0	52,0
1994/95	80,0	188,7	79,5	74,6

	Total	Trigo	Cebada	Maiz
1995/96	60,6	111,1	54,1	82,6
1996/97	116,8	290,5	114,7	119,5
1997/98	100,0	213,7	92,0	141,9
1998/99	116,4	220,1	116,9	136,0
1999/2000	92,4	177,5	80,0	120,1

Fernández Santa-Ana. MAPA, 2000

Non-food farming has been very scarce at the national level and its greater or smaller incidence is related to the ratio of compulsory set-aside, as indicated in Figure 5.

Figure 5 Evolution of non-food farming surface and comparison with the ratio of compulsory set-aside.

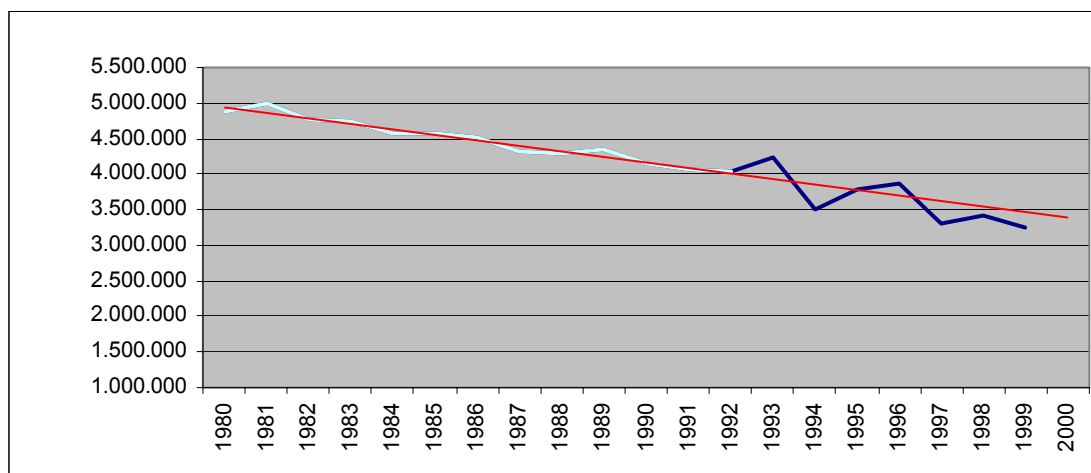


source: MAPA and FEGA

2.4. Evolution of the area of Fallow land

Fallow land statistics include other unoccupied land, i.e. land that has been abandoned or is temporarily unused. Therefore the evolution of these surfaces is influenced by different factors and it is difficult to find a relationship between them and set-aside figures. Figure 6 shows that the amount of unoccupied land continues to fall after 1994. The reduction in traditional fallow land is considerable because fallow land statistics include the area of set-aside lands that cannot be considered traditional fallow land. The decrease in the amount of fallow land is due in part to the abandonment of marginal areas which were precisely those that had a larger area of fallow land and in part to the intensification of farming, reducing the practice of leaving land fallow. The trend in fallow land and other unoccupied land leads us to believe that another reason for the reduction is that due to compensation payments, there are lands temporarily out of use that are later farmed again.

Figure 6 Evolution of fallow land and other unoccupied lands.



Source: MAPA

3. CONTEXT OF THE IMPLEMENTATION OF LAND SET-ASIDE

3.1. Data on the implementation of land set-aside

Table 3 Data on the implementation of land set-aside Spain. Non-irrigated Land

	1993/94	1994/95		1995/96		1996/97		1997/98		1998/99		1999/00	
Compulsory set aside rate	15%	15%		12%		10%		5%		5%		10%	
SCOP (ha) all producers (COP + set-aside)	7269402	7580029		7698481		7327642		7572002		7399660		7434636	
SCOP (ha) professional scheme (COP + set-aside)	4913437	5660139		6088733		6009256		6325396		6349507		6270618	
SCOP (ha) simplified scheme	2355964	1893749		1600861		1308971		1237351		1045426		1159744	
Real set-aside scheme (set-aside/SCOP all producers)	11,53%	16,19%		16,46%		14,99%		12,85%		16,39%		16,17%	
Professional set-aside rate (set-aside/SCOP Professional scheme)	17,06%	21,68%		20,81%		18,28%		15,38%		19,11%		19,18%	
Total set-aside (ha)	838101	1227306		1266853		1098573		972991		1213108		1202494	
Rotational set-aside (ha)	753577	871528		360242									
Total set-aside (ha) (apart from extraordinary)	838101	1227406		1266853		1098573		972991		1213108		1202494	
Compulsory set-aside	838101	987298	80%	963032	76%	680596	62%	400919	41%	439962	36%	739119	61%
Voluntary set-aside		240008	20%	265651	21%	417057	38%	571456	59%	771730	64%	463328	39%
Paid at 48'3 ecus set-aside						1855		2988		152		132	
No paid set-aside						918		616		1416		47	
No food set-aside	5827	55966	4,6%	30742	2,4%	13803	1,3%	5098	0,5%	17910	1,5%	37464	3,1%
Five year set-aside (R.2328/91)		77291		38170		24053		10897					
Extraordinary set-aside													

Source CE DG Agriculture (MAPA)

Table 4 Data on the implementation of land set-aside in Spain. Irrigated Land.

	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
Compulsory set aside rate	15%	15%	12%	10%	5%	5%	10%
SCOP (ha) all producers (COP + set-aside)	1177419	1023305	1102999	743190	861835	842257	894094
SCOP (ha) professional scheme (COP + set-aside)	799254	799075	909926	615611	728040	709895	743042
SCOP (ha) simplified scheme	378165	289517	191849	126365	132950	132049	150601
Real set-aside scheme (set-aside/SCOP all producers)	10,41%	15,49%	17,66%	12,22%	9,43%	9,38%	13,12%
Professional set-aside rate (set-aside/SCOP Professional scheme)	15,33%	19,84%	21,40%	14,75%	11,16%	11,13%	15,79%
Total set-aside (ha)	122558	158518	194746	90799	81257	78999	117347
Rotational set-aside (ha)	121878	105652	53048				

	1993/94	1994/95		1995/96		1996/97		1997/98		1998/99		1999/00	
Total set-aside (ha) (apart from extraordinary)	122558	155433		194746		90799		81257		78999		117347	
Compulsory set-aside	122558	126094	81%	133630	69%	61642	68%	45935	57%	43346	55%	78957	67%
Voluntary set-aside		32424	21%	58470	30%	29128	32%	35316	43%	35647	45%	38415	33%
Paid at 48'3 ecus set-aside													
No paid set-aside						29		6		6		2	
No food set-aside	1006	4339	2,8%	3693	1,9%	1335	1,5%	623	0,8%	859	1,1%	3337	2,8%
Five year set-aside (R.2328/91)		33790		2646		1954		672					
Extraordinary set-aside													

Source: FEAGA.

3.2. Characteristics of Regionalisation. Plan. Spain³

Compensation payments are applied to the unit of farmed surface irrespective of production, although the amount of compensation, in each campaign, is determined based on basic quantities (Ecus/t) multiplied by average yield (t/ha) for each of the homogenous production zones established by the Productive Regionalisation Plan. This Plan has established four categories of average yield: dry land, irrigation land, irrigation maize and other irrigation cereals, applicable in each region or sub-region into which the national territory is divided.

17 regions were defined for non-irrigated land, corresponding with Autonomous Communities, in which Base Areas were assigned to the national total with a differentiated area for maize.

The application of PAC in Spain showed that demand was different depending on land usage, such that applications for aid for dry land did not reach the Base Area assigned to Spain, while applications in the case of irrigation land exceeded the Base Area.

To avoid this overflow, Base Areas were modified in 1997, increasing the area of irrigated land by 248,000 has. with the non-irrigated surplus and reducing yield in order to maintain the balance of production, since these modifications could not represent an increase in the Commission budget destined to Spain.

³ Information for this chapter has been provided by the General Directorate of Agriculture of MAPA.

Table 5 Base Area Spain(ha)

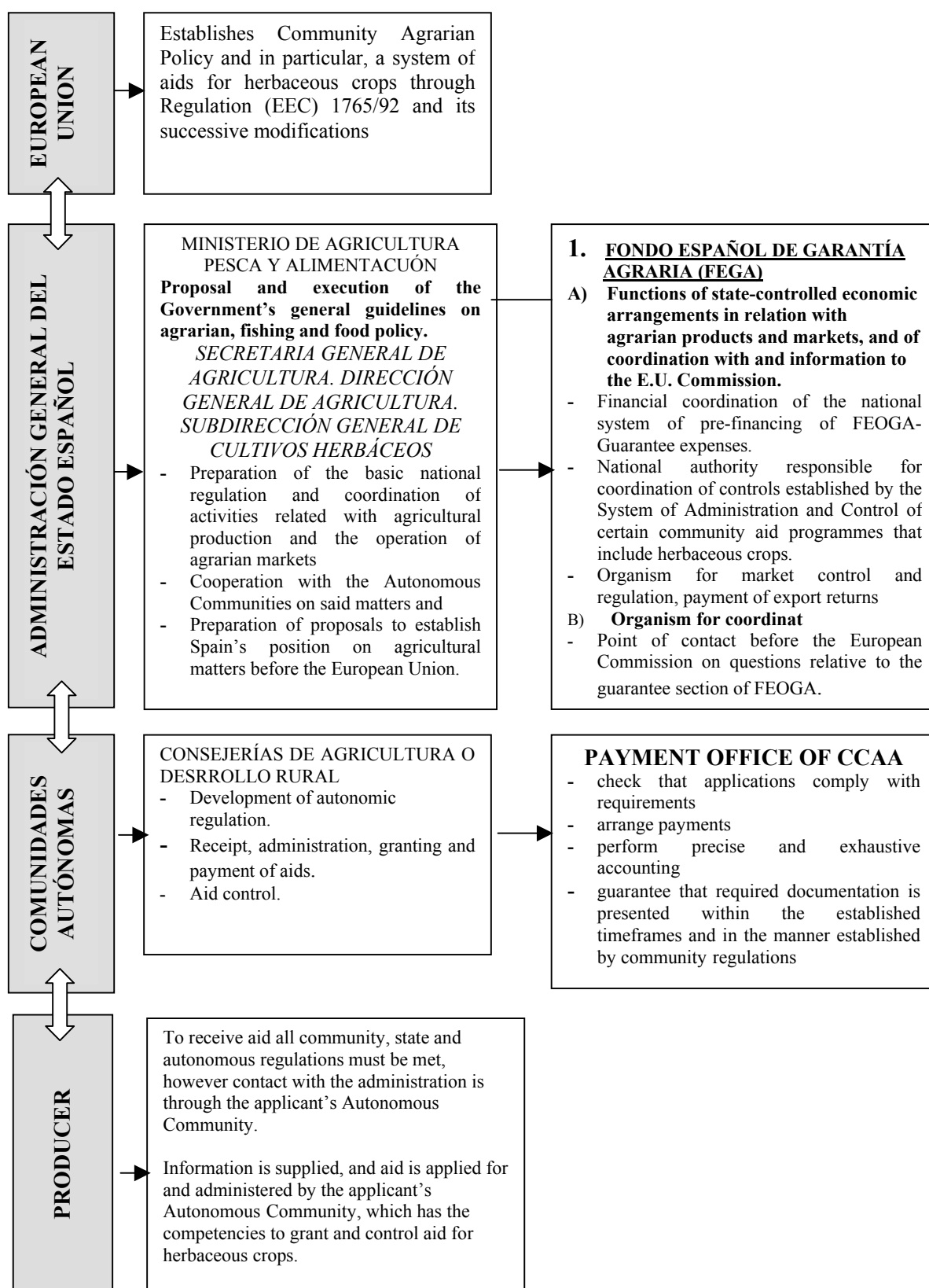
CCAA	1994				1995		
	Dry land	Irrigation land			Dry land	Irrigation land	
		Maize	Other Cereals	Total		Total	Maize
ANDALUCIA	1.390.927				1.184.853	260.000	36.250
ARAGON	724.029				772.265	239.000	96.968
ASTURIAS	13.144				4.640	5	-
BALEARES	85.010				62.025	5.000	950
CANARIAS	3.501				550	10	5
CANTABRIA	7.831				3.831	250	25
CASTILLA- LA MANCHA	1.814.084				1.795.398	300.000	49.000
CASTILLA Y LEON	2.458.914				2.646.042	258.000	94.500
CATALUÑA	334.175				313.531	79.000	29.911
EXTREMADURA	435.125				463.127	121.500	57.825
GALICIA	272.531				75.339	2.000	500
MADRID	96.290				86.746	17.962	10.100
MURCIA	116.700				86.381	17.662	900
NAVARRA	200.984				208.889	44.500	21.956
PAÍS VASCO	50.608				55.572	600	500
RIOJA	56.115				52.551	122.000	2.000
VALENCIA	36.224				36.884	19.600	1.600
ESPAÑA	8.096.192	403.360	720.360	1.123.521	7.848.624	1.371.089	403.360

Source: MAPA

The Spanish Regionalisation Plan was carried out on the regional level and is described in Annex 4.

4. LEGAL SCENARIO OF THE IMPLEMENTATION OF SET-ASIDE

4.1. Organisation of the implementation, monitoring and control of PAC and set-aside surfaces



4.2. National Legislation

For direct applicability of the relevant Community Regulations regarding land set-aside, the MAPA establishes the total or partial reproduction of some aspects of said Regulations and the development of clauses to adapt them to traditional farming practice in Spanish agriculture. For this purpose, a specific Regulation is published each season for the application of land set-aside at the national level.

References of the compiled regulation are given in this chapter.

4.2.1. Period 1991-1992. Regulation prior to Regulation (EEC) 1765/92 of the Council.

The Regulation previous to the McSharry reform relative to land set-aside at the national level consists of a Royal Decree and four Ministerial Orders included in the following chart:

Table 6 Set aside regulation previous to the McSharry reform

YEAR	1990	1991	1991	1992	1992
LAW	REAL DECRETO 11-10-1990, núm. 1255/1990	ORDEN 1-8-1991 RCL 1991\2032	ORDEN 20-12-1991 RCL 1992\49	ORDEN 22-5-1992 RCL 1992\1238	ORDEN 18-12-1992 RCL 1993\20
PUBLICATION	BOE 18-10-1990, núm. 250, [pág. 30530]	BOE 10-8-1991, núm. 191, [pág. 26578]	BOE 10-1-1992, núm. 9, [pág. 653]	BOE 1-6-1992, núm. 131, [pág. 18501]	BOE 23-12-1992, núm. 307, [pág. 43643]
APPLICATION		Years-1992	Years-1992	Years 92/93	
SUMMARY	Modifies art. 10 of Royal Decree 1435/1988, of 25-11-1988, on the system of aids to promote the withdrawal of lands from production.	Procedure for application and granting of aids for temporary withdrawal of herbaceous crops in the season 1991-1992.	Rules for reimbursement of the co-responsibility tax for season 1991-1992 to producers who participated in the multi-year plan for withdrawal of land.	Modifies Order 27-3-1992 (RCL 1992\840) which regulates the procedure for application and granting of aids to producers in the commercial season 1992/93 (1992 crop).	Dictates regulations related to the programme of withdrawal of land from production, regulated in Royal Decree 1435/1988, de 25-11-1988 (R. 1988\2407).

Source: MAPA

4.2.2. Period 1992-1997. Regulation prior to Regulation (EEC) 1765/92 of the Council.

In the period 1992-1997 the entire Regulation relative to the set-aside of farm land was published in the form of Ministerial Order. Depending on the subject, these Orders are classified into three categories:

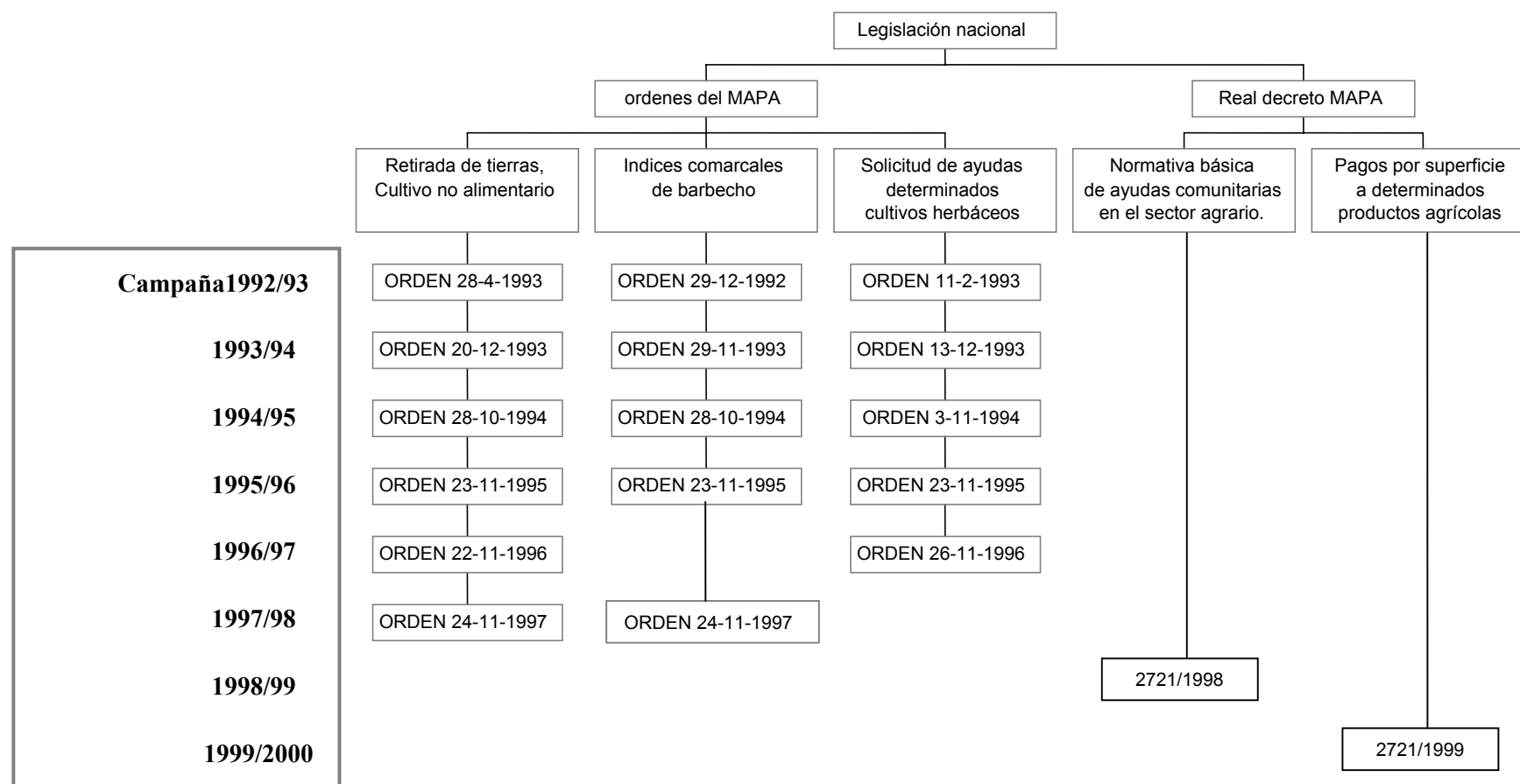
- Regulating the set-aside from cultivation of lands receiving compensation payments [...] and the use of land set-aside from cultivation for production of non-food raw materials.
- Defining percentages of traditional fallow land in dry herbaceous crop land.
- Regulating the procedure for application and granting of aid by area for certain herbaceous crops.

In the period 1997-2000 two Royal Decrees were published with reference to the Policy of Land Set-Aside, and principally to:

- Basic rules for community aids in the agrarian sector
- Payment by area for certain agricultural products

The above legislation is set out in the graph on the next page and is detailed in the following charts.

National legislation on the set-aside of farm lands. Period 1992/1999. Issuing Agency: MAPA



4.3. Texts from national legislation referring to the environment in the context of land set-aside.

- The ministerial orders regulating the set-aside of land from cultivation, under the article “*Application of the Principle of Proportionality*” make reference to the **form of maintenance of set-aside lands**. The text is transcribed below:

“Lands set-aside from cultivation must either be left fallow, by means of minimal ploughing or traditional farming methods, or maintain an adequate vegetable cover, either wild or cultivated, to minimise the risks of erosion, weeds, plagues and diseases, and to maintain soil salinity and preserve or even improve production capacity and favour the increase of bio-diversity.

To achieve this, farming practices suited to each area will be applied, including treatment with authorised non-residual, low-risk herbicides. [...]. Within the scope of their competencies, the Autonomous Communities may establish pertinent technical regulations related with the planting and maintenance of the vegetable cover best suited to the different areas of their territory.”

This same text is reproduced in Annex 5 of Royal Decree 2721/1998 y in Annex 7 of Royal Decree 1893/1999.

- Ministerial orders regulating the set-aside of land from production, under the article “*Manners of Set-Aside of Lands*” make reference to the **percentage of lands for set-aside**:

“For non-irrigated land the sum of the compulsory percentage in the given season and the 10% voluntary set-aside may be exceeded, in the following cases:

[...] In cases of land consolidation and in other special cases specifically authorised by the competent organ of the Autonomous Community, which represent a change in the structure of independent farming at the request of the farmer.”

This same text is reproduced in Royal Decree 2721/1998 and Royal Decree 1893/1999. The latter adds:

“For irrigated lands: when land is situated in areas subject to irrigation improvement plans implicating land consolidation.”

- Other environmental regulations administered by Autonomous Communities

4.4. Relative to traditional white fallow.

Regulations (EEC 2294/1992, 2295/1992 and 2780/1992 of the Commission, establishing arrangements for the application of the system for support of farmers of certain oleaginous, proteaginous and cereal crops, respectively, establish that compensation payments will be granted for areas planted entirely **following traditional practices recognised locally**.

In certain agricultural regions in Spain, fallow is a cultural practice of non-irrigated farming. For this reason, the MAPA believes that it is necessary to regulate this practice for the purpose of determining compensation payment per hectare. This serves to prevent some farmers from abandoning traditional fallow practices in the area where they farm for the sole purpose of increasing subsidisable area. This is not only against Community regulations, but also could distort the current production model and cause production to exceed the respective regional base area, with the resulting application of penalties laid out in Community regulations.

To this effect, the maintenance of a quota of vacant fallow land at a **regional level** is considered a traditional practice of non-irrigated farming. Traditional fallow rates are given for each rural area.

These indexes are obtained by average of the amount of fallow land performed in the period 1989-1991.

Traditional fallow land⁴ rates in non-irrigated herbaceous crop lands are determined for each season in the following ministerial orders:

Season 1996/1997: ORDER of 23 November 1995 (BOE 27 November 1995)

Season 1998/1999: ORDER of 24 November 1997 (BOE 26 November 1997)

Article 5 of said order establishes that the Autonomous Communities are competent to decide the singular objective criteria for exceptions to compliance with the established quotas of fallow land.

The regions affected by application of environmental measures regulated by Royal Decree 51/1995 dated 20 January, which establishes a system of horizontal aids to promote methods of agricultural production compatible with the demands of the environment, may count as vacant fallow land, fallow land planted with leguminous fodder crops.

⁴ Regional indices of traditional fallow land are detailed in annex 3 of the national report

5. NATIONAL SYNTHESIS OF THE STUDY

To provide answers to the questions of evaluation, the method described in point 1.2 (page 1) of this report has been used. The following is a synthesis and conclusions of certain questions of the evaluation.

5.1. Answer to questions 431- 444

5.1.1. Question 4.3.1:

Did the existence of a remunerated set-aside encourage good crop rotation and which were the alternative crops in the plots where a set-aside was established?

- **Elements of response at the national level**

Effect on rotations

As a result of the process of integration and validation of the regional reports, already described, the following general considerations are reached:

- Land set-aside has not removed minority crops (horticultural, proteaginous, oleaginous, industrial ...) from the alternative, rather in general it has affected part of the majority COP crops (mainly barley).
- The effect of set-aside on alternative crops is more sensitive where there is less tradition of letting land lie fallow. In these cases, crop rotation increases.
- The effect of set-aside on the overall profitability of alternative crops is considered better in those regions where average production is lower.

Alternative crops on set-aside land

Alternative farming of set-aside land has had very little repercussion. The principal use to which these lands have been put has been the practice of agricultural fallow.

The development of alternative farming depends on two factors:

- The existence of a market for non-food production.
- The availability of production factors, principally water resources.

Non-food farming has developed better where assisted by the development of transformation industries, and in areas with better water resources or irrigation; although in these latter, the possibility of transferring set-aside [to non-irrigated land] has minimised the effect of set-aside.

The area in hectares dedicated to non-food production in Spain throughout the period of application of the PAC and prior to Agenda 2000 is the following.

Table 7 No food production surface in Spain (has) by regions

Region	1993	1994	1995	1996	1997	1998	1999
Andalucía	6832	18459	2384	10390	3867	15839	5909
Aragón	0	365	361	274	76	0	0
Asturias	0	0	0	0	0	0	0
Baleares	0	0	0	0	0	22	4
Canarias	0	0	0	0	0	0	0
Cantabria	0	0	0	0	0	0	0
Castilla la Mancha	0	11445	450	1850	885	778	7917
Castilla y León	0	15765	128	1341	487	1776	25647
Cataluña	0	265	817	600	313	149	628
Extremadura	0	643	144	73	30	196	59
Galicia	0	0	14	0	0	0	0

Region	1993	1994	1995	1996	1997	1998	1999
Madrid	0	0	29	10	0	0	0
Murcia	0	0	64	0	0	0	0
Navarra	0	916	202	471	71	30	46
País Vasco	0	600	0	161	14	4	665
La Rioja	0	0	0	0	0	0	0
Comunidad Valenciana	0	5	0	0	0	0	0

Fuente: FEAGA

5.1.2. Question 4.3.2:

Did the location of the plots set-aside in use encourage better cultivation methods?

The round of contacts maintained with national administrators has ratified the general conclusions of the regional reports.

It is not possible to establish a direct relationship between the location of set-aside parcels and the evolution of farming techniques, but it can be stated that the measure has contributed to consolidate and recover a series of good traditional farming practices.

The following table shows the overall result of the surveys conducted regarding the location of set-aside parcels:

Table 8 Location of set aside lands at surveyed holdings

	Opción	%
<i>Rotational set aside</i>	Use of rotational set aside	75%
<i>Fixed Set Asidee</i>	Location of set aside along water courses	4%
	Location of set aside in very small plots	16%
	Location of set aside in little rich or non-watered plots	19%
	Location of set aside in too far plots	6%
	Location of set aside in slope plots	4%
	Location of set aside in few grown plots	5%
	Location of set aside in plots specially bought to that	1,5%
	Other location of set aside	4%

Source: Data taken from surveys to producers.

Set-aside parcels are rotated unless they cause additional difficulties to farm (75% of the set-aside area of farmers surveyed), in which case they are usually left fixed. Therefore, they tend to be used as an element for optimisation of production.

The evolution of farming practice on set-aside land depends almost exclusively on the practices used in the rest of the farm, which in turn depend upon criteria of overall profitability and the evolution of equipment and plant treatments. However it is clear that if land set-aside is accompanied by complementary programmes, management of the set-aside land becomes separate from the rest of the operation and is based on these programmes. Cases in point are the recovery of aquiferous land in Castilla la Mancha and of cereal-producing steppes in Castilla y León.

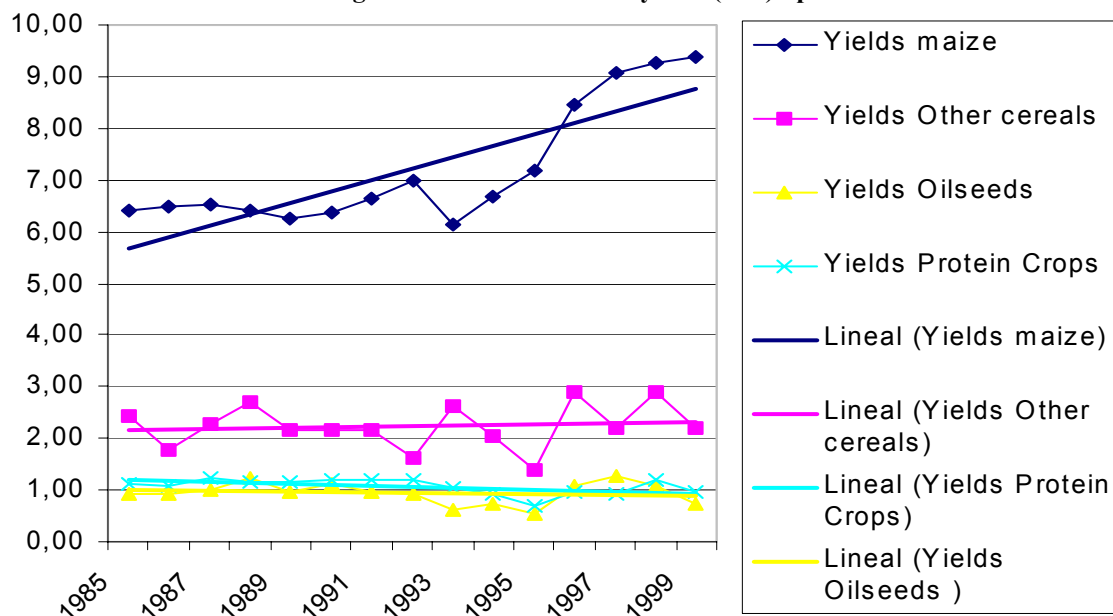
5.1.3. Question 4.3.3:

Did the existence of the remunerated compulsory set-aside cause production intensification in the other plots?

- National level answer

As indicated in Figure 7, national data show that maize production grew sharply after 1993 while other cereals remained constant, the same as oleaginous and protein crops.

Figure 7 Evolution of COP yields (t/ha) Spain.



Source: MAPA

It has been observed in the regional reports that the evolution of production is conditioned by the payment of compensation, but that the effect is the opposite on the most productive lands (where productivity increases) from the least productive (where it decreases). This is because compensation payments linked to area do not encourage production. It is estimated that the cost of cultivation is covered by a yield rate of 2t/ha. In areas where this rate is guaranteed, farmers will try to increase productivity in search of higher profits (this is observed in Castilla y León and in irrigated cornfields). In more arid areas where most years this yield is not reached, as is the case of numerous areas in Castilla la Mancha, Aragón and Extremadura, higher profits are not obtained through increased production but through cost reductions.

5.1.4. Question 4.3.4:

To what extent has the existence of the compulsory set-aside modified the farm competitiveness by an adaptation of the productive structures? (e.g. farm size, farming prices, land prices, etc.)

• National level answer

To answer this question at the national level, a synopsis of the information obtained from the regional reports is offered.

Size of holdings

In a study conducted by the General Directorate of Agriculture (General Subdirector of Herbaceous Crops) of MAPA in October 2000, titled *Cereals in the New Millennium: current situation and perspectives*⁵ with regard to structures it concludes:

At the national level a significant number of holdings cover a minimal total cultivated area: holdings with an average area of less than 12 ha. represent 35% of the total, with an average area of herbaceous

⁵ Author Vicente Flores Redondo: Head of Production, Pricing and Regulation

crops of only 13%. At the opposite end of the range holdings with more than 300 ha. represent 2.5% of total holdings and 11% of total herbaceous crops.

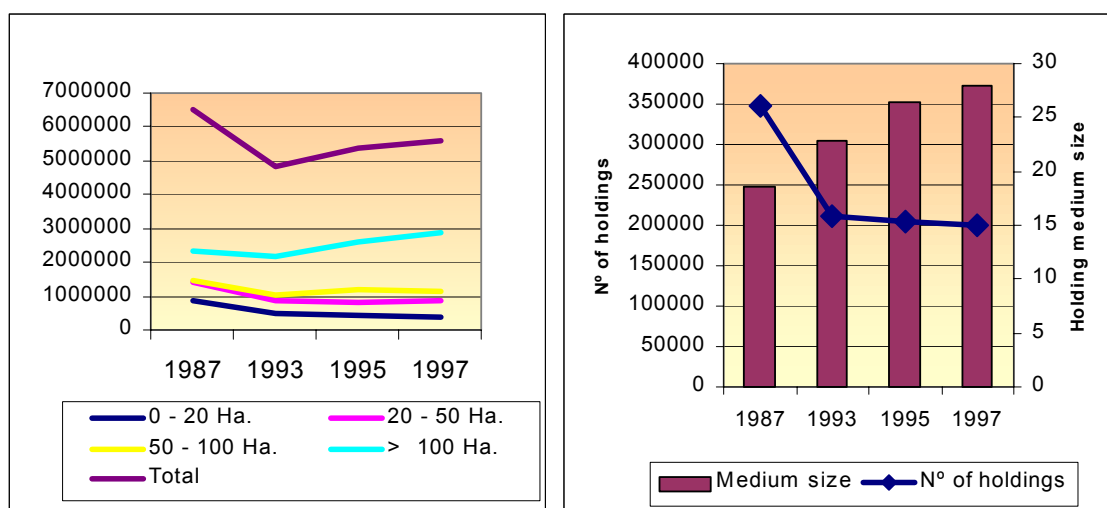
The same study reflects on the type of holdings: the fact that part of the group of small holdings are not farmed by professional farmers, but constitute a secondary activity for the owner or are part of holdings whose economic and technical orientation is not cereal production.

The regional studies show that the average area of cereal farms grew in the period 93-99 at a rate similar or higher (depending on the region) than in the period 87-92⁶. However the reasons for growth in these periods are different.

- In the period 87-93, despite a reduction in overall area, the average size of holdings grew due to a larger reduction in their number.
- In the period 93-99, the number of holdings remained constant and the increased size is the result of increased area.

The figure bellow shows the average of the four regions studied regarding cereals surface evolution by type of holdings and holding medium size evolution.

Figure 8 Cereals surface evolution by type of holdings and holding medium size evolution.



Source: Data taken from INE

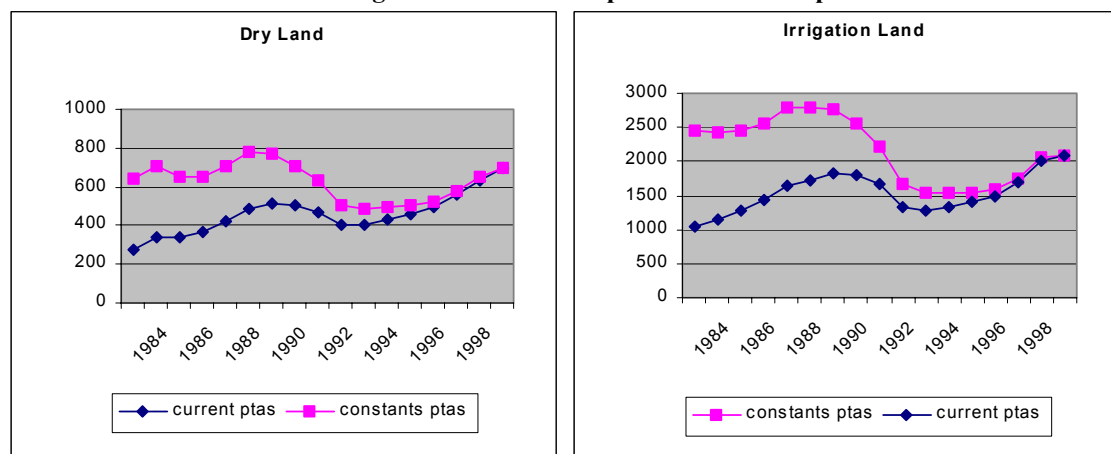
Land market

Data from the MAPA survey of land prices show that the policy of compensation payments effectively influences the evolution of land prices⁷. From the time of the PAC reform the downward trend in prices reversed and an upward curve began. The increase is lower in Castilla y Leon and Aragón, and more noticeable in Castilla la Mancha where in 1996 a faster growth rate in prices was seen. In the opinion of experts interviewed, this situation is due to the Euro effect. In the case of Extremadura it is observed that the price of land is much more conditioned by the euro effect than by the compensation payment policy, in view of the change in trend of land prices in the middle of the 93-99 period, while at the beginning of said period land prices continued downward although at a slower rate.

The figure bellow shows the behaviour of land prices evolution at national level.

⁶ VID first figure of question 434 in regional reports

⁷ VID second figure of question 434 in regional reports

Figure 9 Labour land prices evolution. Spain

Source: Data taken from MAPA e INE

Although no data exist regarding leased land, individuals consulted indicate that it has become more difficult to lease land, with higher prices and lower availability.

5.2. Answer to questions 441- 444

During the period 1994-1999, Spanish program in relation to 2078/92 regulation regarding the *Promotion of agrarian productive methods compatibles with the environment* was applied in Autonomous Communities and the national territory as a whole.

The program has been constituted by two types of measures : horizontal measures to be applied at national level and local measures to be applied in selected areas.

Local measures started in Castilla La Mancha with actions implemented in *Parque Nacional de las Tablas de Daimiel*. The following year Castilla y León was incorporated with actions implemented in Steppe Birds Areas. The environmental impact of these programs has been analysed in the regional reports. In this report they are again mentioned in order to give a summarized and comparative answer following the criteria at regional level.

In order to give an answer to the evaluation questions following the criteria at national level we focus on the horizontal measures to be applied at the national territory.

5.2.1. Comparative answer (criteria at regional level)

5.2.1.1. Question 4.4.1:

Did the adoption of the set-aside have a significant impact on the improvement of the soil management (erosion, fertility, structure, etc)?

• Synthetic answer

At the national level the impact of set-aside on land management is mainly neutral, since there is scarcely any change with regard to the previous situation.

Maintenance of land set-aside has mainly effected bare and rotational land. 67% of all farmers surveyed in the four regions rotate 100% of the set-aside land and 24% rotate part and leave the other part fixed. 82% maintain the set-aside plots bare. Ploughed and rotational fallow is traditional

practice in arid and semi-arid areas. Set-aside therefore is integrated within alternative farming in the same way as traditional fallow, with no change in the maintenance of the land with respect to the previous practice.

The impact can only be considered negative when located in sloping areas or when highly marginal land is recovered to locate the set-aside, since these practices favour erosion. This circumstance has occurred in local areas of the Extremadura pastures and in some mountainous areas of Aragón.

5.2.1.2. Question 4.4.2:

Did the adoption of the set-aside of land have a significant impact on the improvement of the water management (pollution, water resources maintenance including ground waters, floods etc)?

- Synthetic answer**

With regard to management of a scarce resource, the impact of set-aside on water administration is largely positive in irrigation areas and mainly neutral in dry areas.

With regard to water pollution from the use of fertilisers, at the national level an increase in the use of nitrogenated fertilisers has been observed which could have a negative impact due to the higher content of nitrates in surface and underground waters. We are unable to state that this trend in the use of fertilisers is a consequence of the land set-aside policy.

Management of a Scarce Resource

In irrigated lands the impact of land set-aside has been positive because it facilitates a more rational use of water for irrigation. Especially in some areas where aquiferous resources have been found to be over-exploited (Castilla - La Mancha) the measure has reinforced the agro-environmental programme to economise on water, contributing to improve efficiency.

Water pollution from use of nitrogenated fertilisers

The principal environmental problem caused by the application of fertilisers in farming is the pollution of water by nitrates. Data at the national level reflect that as of 1993 the downward trend in the consumption of nitrogenated fertilisers reversed (Figure 10).

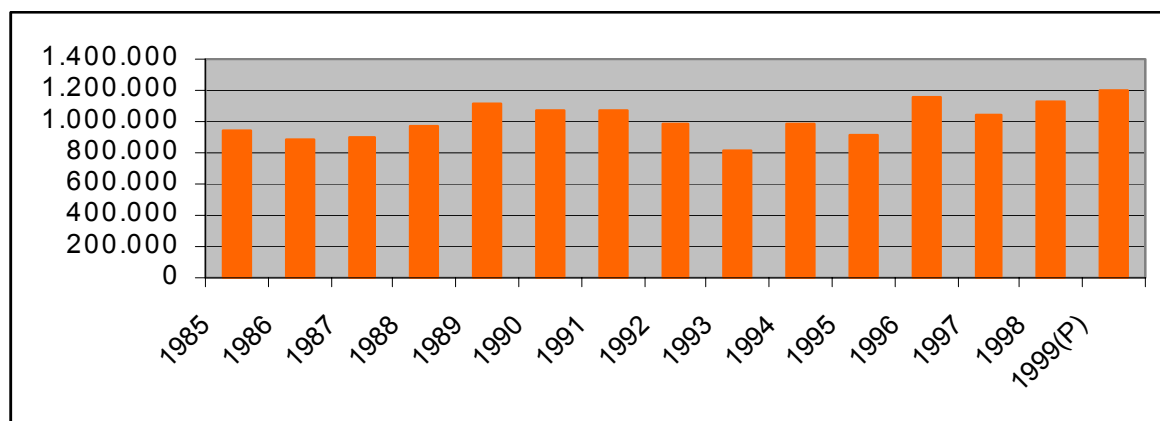
Spain is not known for an excessive use of chemical fertilisers, per 1988 data shown on the following chart.

Table 9 Units of macronutrients used by hectares (FAO , 1988)

	N	P ₂ O ₅	K ₂ O	TOTAL
Spain	56,2	26,3	16,4	98,9
Europe (mean)	111,7	55,7	59,9	227,3

National consumption has increased since 1988 although we cannot say that this trend is a result of the application of land set-aside policy.

Figure 10 Use of nitrogenous fertilizers (t of N) Spain



Source: INE

5.2.1.3. Question 4.4.3:

Did the adoption of the set-aside of land have a significant impact on the improvement of the landscape management ?

- **Synthetic answer**

Withdrawn lands do not have a significant impact on the landscape. In cereal lands, they integrate into the patchwork of richly varied tones of brown and red (bare set-aside and fallow) and greens (crops) which constitutes the traditional landscape.

- **Detailed answer**

In arid or semi-arid areas that represent a significant part of the cereal lands in Spain, poor soil has required the rotation of crops, and the landscape is characteristically dominated by a patchwork of fields of cereal, legumes, pasture and fallow. Extensive cereal fields, low on use of fertilisers and agro-chemicals, provide food and shelter for highly interesting species, unique to Spain or scarce in the rest of Europe. It is therefore an agriculturally productive eco-system which responds to the multi-functional character recommended by the European Commission in the reform of Agenda 2000.

Application of set-aside has scarcely impacted the configuration of the landscape, since it does not distort the traditional landscape made up of the described patchwork.

It has only had a negative impact in local areas where it has not integrated into the traditional landscape, such as the Extremadura Meadow.

5.2.1.4. Question 4.4.4:

Did the adoption of the set-aside have a significant impact on the bio-diversity maintenance?

- **Synthetic answer**

Implementation of land set-aside has not had a negative impact on the conservation of bio-diversity since the land set-aside integrates into the traditional cereal/fallow habitat.

On the contrary, it contributes to the consolidation of an extensive and productive eco-system, low on use of fertilisers and agro-chemicals, which offers shelter and food to highly interesting species unique to Spain or scarce in the rest of Europe. It is therefore a productive agricultural

eco-system in line with the multi-functional model recommended by the European Commission in the reform of Agenda 2000.

Application of set-aside with traditional ploughing contributes to the spread and configuration of the patchwork formed by cereals, legumes, pasture and fallow land which offer shelter and food to many species of great interest, unique to Spain or scarce in the rest of Europe (Dolores Manteiga López; Carlos Sunyer Laichondo (1997)). We can therefore conclude that it does not negatively impact bio-diversity, but rather contributes to its maintenance.

In some areas (Aragón and Extremadura) it has resulted in the incorporation of abandoned land into farmed land and, as shown in different studies, the mere abandonment of land does not increase bio-diversity, while agricultural activity favours the increase of animal species associated with open air and human activity.

The positive effect that set-aside has had on the conservation of bio-diversity has been more intense in the areas where the measure has been accompanied by an agro-environmental programme. Two Autonomous Communities are applying agro-environmental programmes with a certain degree of intensity: Castilla La Mancha and Castilla y León

In Castilla y León the programme consists of financial compensation to farmers who voluntarily extensify production (increased areas of fallow land, reduction in the use of fertilisers, etc.) in certain areas to protect Steppe birdlife, practically unique in Europe and in grave danger.

In Castilla la Mancha, thanks to the water saving programme, water has been preserved in aquiferous areas, which has positively impacted the landscape and bio-diversity, since these areas are home to a large variety of flora and fauna.

Both programmes have been complemented by the land set-aside measure which has contributed to increase their efficiency.

5.2.2. Answer at national level (criteria at national level)

5.2.2.1. Question 4.4.1 – 4.4.4.

Did the adoption of the set-aside have a significant impact on the improvement of the soil / water/ landscape management and bio-diversity maintenance?

- **Synthetic answer (criteria at national level)**

There is not specific legislation concerning environment in set aside lands management. At national level there is an agro environmental measure applied in Spain called: Extensive cultivation in cereals producing areas. This measure is not related to set aside lands but to traditional fallow land. The objective of this measure is to encourage extensive cultivation aiming to preserve soil, water, biodiversity and consequently landscape. The impact of the measure has been moderate as only about 18% of the lands that might apply for the measure are involved.

- **Detail of answer at National level**

The program *Promotion of agrarian methods compatibles with environment* includes as an horizontal measure the Extensive cultivation in cereals producing areas

This program aims the maintenance of a kind of extensive cultivation including some requirements in fallow lands. The objective of the measure is to encourage traditional fallow. These aids are not addressed to set aside lands but to traditional fallow lands which are not grant aided by CAP.

The applicants have to:

- Not to burn stubble in all holding surface area
- Not to use fertilisers and pesticides in fallow surface during the non crop period..
- Keep stubble at least for 5 months.
- To carry out a low deep ploughing (less than 20 cm) at the end of the winter following contour lines in order to avoid erosion.
- To set up an annual no ploughing schedule. This schedule will be done taking into account reproduction period of the steppes fauna. Non ploughing minimum period will be 5 months. This period allows to include most of the fauna to protect.

So this measure influences soil, water landscape and bio diversity

Owing to the fact that two aids over the same plots are not allowed, areas where other specific measures are applied are excluded. Holdings in which traditional fallow index is under 10 (total fallow/ cultivation lands) are also excluded.

Considering these requirements, the surface in Spain that may apply this measure is about 2.443.189 ha. Only about an 18 % of this surface has involved in the program although the number of applicants increased along the period of implementation (1994-1999) .

5.3. Answer to questions 451 and 452. Complexity of regulation and its setting in place

5.3.1. Question 4.5.2:

What effect did numerous regulatory adaptations and the existence of numerous individual cases and possibilities of transfer have caused on the effectiveness of the set-aside instrument?

From interviews with administrators and surveys of farmers conducted for the regional reports, the conclusions reached that the principal disadvantages of legislation, which reduce efficiency of the measure of land set-aside, are:

With regard to non-food crops

The complexity of administrative requirements together with the risk of penalisation of the entire operation in the event of non-compliance with all requirements has revealed itself to be one of the causes of the scarce relevance of non-food crops.

In the case of non-food products that could be used as food (cereals and oleaginous crops), sowing must be done under contract, which increases the administrative procedures not just for the farmer but also for the Administration which must implement out strict control measures. As a result, subsidies are received late because of the need to check that the product has effectively been destined to non-food uses.

For this reason farmers do not see the incentive to re-sow set-aside with non-food crops.

With regard to set-aside with green cover

Regarding the possibility of maintaining set-aside lands with a vegetable cover, national legislation establishes: "in the event a vegetable cover is maintained, this can in no manner be used for agricultural purposes" including its use as fodder. For this reason in some regions (Castilla La Mancha) green cover set-aside is only allowed under special conditions, given the difficulty for the Administration of verifying that vegetable cover in set-aside land has not been used for pasture.

Regarding the application of proportionality

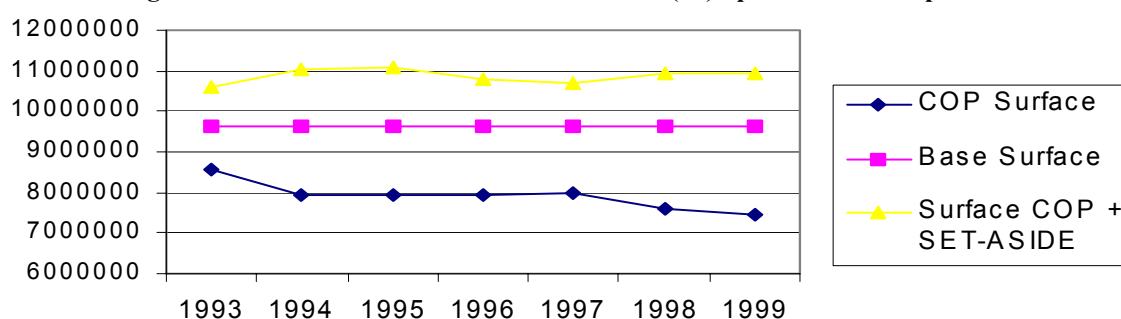
The regulation allows for the transfer of set-aside on a single farm containing land with different regional production applying the corresponding index. of transfer. This results in more complex control measures for the Administration and the consequent increase in costs which must be taken into account when evaluating the efficiency of the measure.

5.3.2. Question 4.5.2:

What effect did numerous regulatory adaptations and the existence of numerous individual cases and did possibilities of transfer have cause on the effectiveness of the set-aside instrument?

The difficulty of controlling eligibility of the land for which compensation payment is requested means that the COP+ area set-aside is at the national level higher than the base area (an average of 13%) throughout the entire period. This trend is more or less stable and in recent seasons has been lower than the maximum achieved in 1995.

Figure 11 Evolution of COP area and base area (ha) Spain. Source : report authors.



Source : Data taken from MAPA y FEGA

The principal conclusions reached by the regional reports regarding efficiency of the legislation are given below:

- The various national and autonomous regulations allow better adaptation of the regulation without increasing bureaucracy for the farmer or excessive work for the Administration, while allowing room for maneuver to adapt to circumstances in the different regions.
- Administrative problems associated with implementation and control of set-aside experienced by the farmers surveyed are listed below in order of importance:

Table 10 Main administrative problems detected

- The information about set aside rates comes too late.	61%
- Too late reception of subventions.	58%
- Complication of administrative procedures.	56%
- Lack of integration of the different PAC subventions, specially agroenvironmental.	48%
- Surface errors in declaration.	29%
- Not reached minimum size of plots (surface or width).	26%
- Problematic date of beginning or end of set aside regarding cultural current practices.	20%
- Minimum yield of non-food set aside not reached or difficult to reach.	4%

Source: Survey to producers

6. UNEXPECTED EFFECT OF SET ASIDE

The principal unexpected effects of set aside reached by the regional surveys and managers are given below:

- Negative impact on the evolution of farm size. The generous support payments currently provided by CAP reinforce the problem of farm size and structural rigidity in Spain. CAP aids encourage landowners to keep their land and to continue with their marginal part time farming activities which they might otherwise abandon.
- Measure management system, by means of professional and simplify schemes differences , helps to keep low efficient productive structures. If farmers find advantages at simplify scheme they can divide their holdings using several applicant forms. Then they profit the advantages of a professional scheme management and the simplify scheme regulation. So statistics may be different from reality and decisions taken regarding that data could be wrong.
- Compensatory payments plus set-aside have increased lease holding lands price and have complicated holdings management. Tenant farmers must fulfilled CAP requirements in every land owner's application and so they can't manage the whole holding in an efficient way.
- Set –aside implementation measure has contributed to create a bad image of farmers before other people's eyes.
- Set-aside lands have had an environmental positive impact which was not pretended at first. Adventitious species which had been beaten by modern producing systems are developing again in set aside plots. This adventitious species may have a positive impact regarding biodiversity and may be used by cattle.
- Abandoned labour lands have been recovered .
- Set aside has encouraged the appearance of “aid hunters” whose only purpose is to get the aids and not to cultivate the lands.