

Annexe 20 du rapport d'évaluation

final draft report

**EVALUATION OF THE IMPACT OF COMMUNITY MEASURES
CONCERNING SET ASIDE**

Regional Study: The Netherlands

Amersfoort, June 2001

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1. Regional context

1.1 Overview of the region from an agricultural point of view

The Netherlands is considered as one single region. Within the country, two production regions can be distinguished, with different compensation rates; a zoning map is given in annex 1. Whenever relevant, the distinction will be made in the report. Without further notice, however, all analysis refers to the Netherlands as a whole.

1.2 Climate

Some climate characteristics are given in illustration 1.1. The climate of the Netherlands in general is oceanic, with gradual differences between the north/eastern part, which is slightly colder in winter and the south/western part, which is a bit warmer all over the year. The larger arable regions are in the upper north, the polders in the middle of the country and in the south-west.

Illustration 1.1 Climate characteristics of the Netherlands
(average, 1961-1990)

Location	Rain/snow (mm/year)	Days with rain/snow (year)	Temperature		Days with frost (year)	Sunshine (hours/year)
			January	July		
			(°C)			
NE (Eelde)	779	138	1,3	15,9	77	1415
Central (De Bilt)	820	131	2,2	16,8	65	1477
SW (Vlissingen)	745	127	3,2	16,9	29	1536

Source: Royal Dutch Meteorological Institute

1.3 Population, economic value and land use

The total population is 16mln (2001). The total employment in the agricultural sector¹ as a whole amounts to 228.000², or 3,6% of total employment (1999 data).

¹ Agriculture, fisheries

² Measured in fte (full time equivalent); the total number of people working in the agricultural sector is 292.000

The major economic sectors, measured in terms of employment, are trade and services (73%) and industry (23%). Total employment in agriculture has decreased over the past 25 years at an average rate of 3.000 (1,9%) per year.

In the past decades, while the number of jobs in the agricultural sector decreased, the average age of the farmers/owners increased. The number of heads/owners of farms aged under 25 decreased from 1855 in 1975 to 192 in 1999. For arable farms, the situation is still somewhat more explicit than in other agricultural sectors, see illustration 1.2.

Illustration 1.2 Breakdown of agricultural farms as personal business by age of the head of the firm

Type	Age class							Total number of units
	<25	25-29	30-39	40-49	50-64	65+	total	
All farms	0.2%	1.4%	15%	23%	41%	19%	100%	97 151
Of which: arable farms	0.3%	1.1%	12%	22%	41%	23%	100%	12 253
other farms	0.2%	1.5%	16%	23%	41%	19%	100%	83 898

Source: National bureau of Statistics

The economic value of the total agricultural sector (including arable production, market gardening, dairy cattle, pig breeding, fisheries, etc.) is MEuro 20.162, or 2,9 % of Gross Domestic Product (1999).

The total area of the Netherlands is 4,3 million ha (excluding) sea; the amount of land used for agricultural purpose is 2,35 mln ha (1996, most recent available data). This is 54% of the total area of the Netherlands³. This percentage is steadily decreasing at a rate of 0,3% per annum (about 7.000 ha/yr).

³ Including water, but excluding the North Sea and the Waddensea

Illustration 1.3 Land use in the Netherlands by global category

Use category	1989		1993		1996	
	ha	%	ha	%	ha	%
Agricultural	2 399 136	58%	2 375 528	56%	2 350 813	54%
Water (excl. sea)	762 795	18%	879 719	21%	930 257	22%
Wood	309 821	7%	310 815	7%	323 335	7%
Built area	296 962	7%	309 324	7%	320 096	7%
Natural grounds	140 657	3%	140 918	3%	137 850	3%
Traffic/infrastructure	130 553	3%	133 126	3%	134 033	3%
Recreation	76 099	2%	80 943	2%	82 705	2%
Other	34 632	1%	37 354	1%	38 517	1%
Total	4 150 656	100%	4 267 726	100%	4 317 607	100%

Source: National bureau of Statistics

More than half of the agricultural area in the Netherlands is (permanent of temporal) grass land, mainly for cattle or cattle feed. Arable crops take 41%, see illustration 1.4.

Illustration 1.4 Breakdown of cultivated area by type of agricultural production

Type of use	1985 ⁴	1999	2000	2000
	1.000 ha			%
Grass	1164,3	1018,0	1011,9	52%
Arable crops	726,1	802,2	806,2	41%
Market gardening/greenhouse	123,6	119,7	112,0	6%
Fallow	5,0	23,0	22,0	1%
Wood (fast growing/biomass)	0,0	3,9	3,5	0%
Total⁵	2019,0	1967,0	1955,5	100%

Source: National bureau of Statistics

The total production of the agricultural sector in the Netherlands is Euro 17,9 mld (1999), of which the arable sector has a share of 13%.

⁴ For all agricultural data, a year refers to the situation as measured in May of the year. The Agricultural Census was formerly called "May Census"

⁵ Total cultivated land is smaller than "land in agricultural use" given illustration 4, as the latter also includes farmhouses, other farm buildings, farmyards, roads, etc.

Illustration 1.5 Added value of agricultural branches

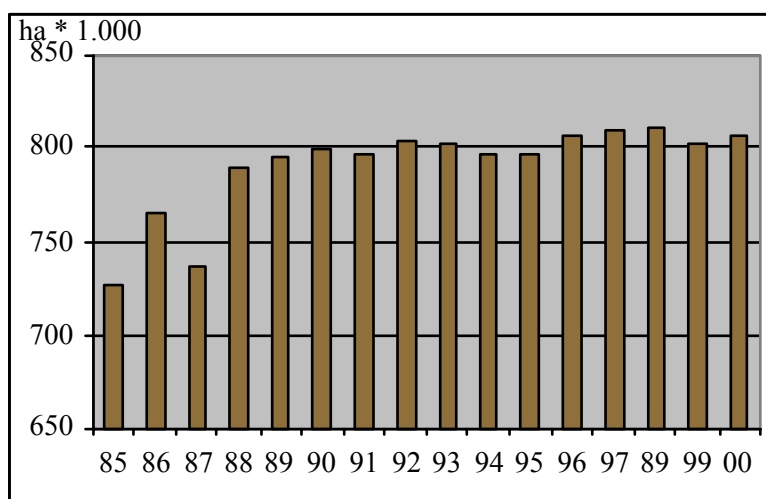
sector	share in total added value
arable products	13%
cattle and dairy	43%
horticulture	39%
total	100%

Source: National Bureau of Statistics

1.4 Development of arable land and the number of farms

From this moment on, all data in the report refer to arable land and arable farms only, unless stated otherwise. The total amount of agricultural land used for arable crops in the Netherlands is at the moment 800.000 ha. After an increase in the second half of the 1980's (mainly due to breaking of grass land), it has stabilised around this value (illustration 1.7) with small fluctuations of 0,6% per year.

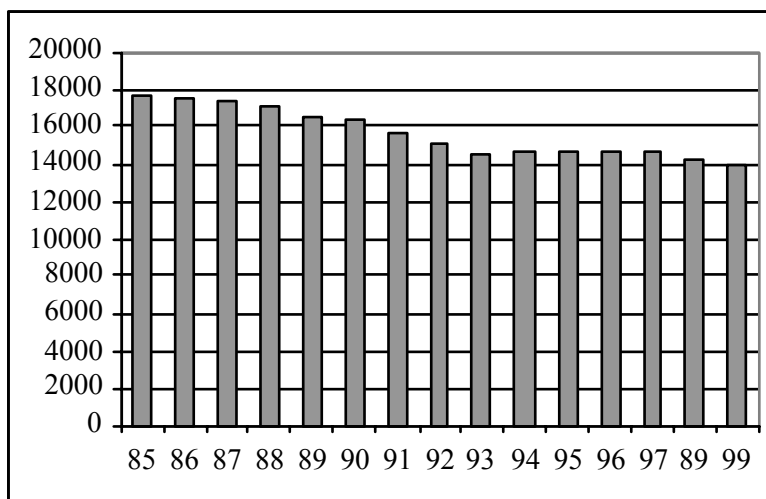
Illustration 1.6 Development of arable land



Source: National bureau of Statistics

Whereas the production area increased or stabilised, the number of farmers decreased almost constantly, from 17.560 in 1985 to 13.860 in 1999, or at an average rate of 260/year.

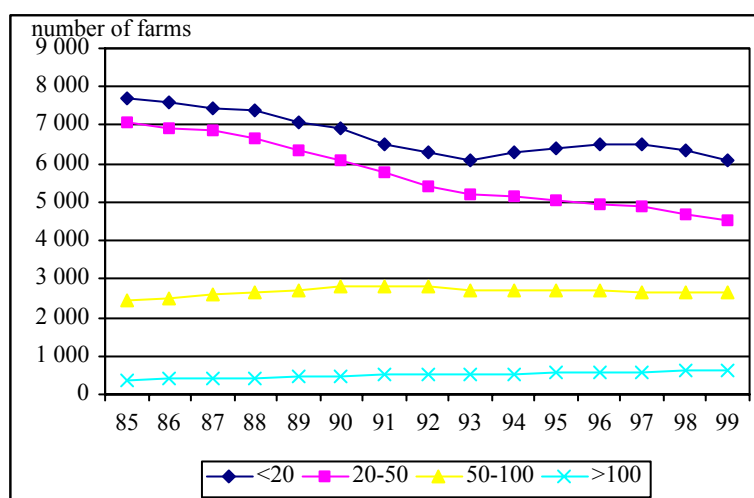
Illustration 1.7 Development of number of arable farms



Source: National bureau of Statistics

As a consequence, the average farm size increased in the same period by almost 40%, from 41.4 ha/unit in 1985 to 57.9 ha/unit in 1999. In particular, the number of middle-sized farms in the size class of 20ha/unit to 50 ha/unit has declined, see illustration 1.8 (as always, details are given in Annex 5).

Illustration 1.8 Development of arable farms by size



Source: National bureau of Statistics

A remarkable discontinuity in the trend is shown in 1993-'94. A relation with the MacSharry reforms seems obvious (financial support for farms which would otherwise have terminated), but direct empirical evidence is lacking. A possible explanation is that farmers have sold part of their land. In the period 1992-1995 in the Netherlands large (sub)urbanisation plans have been developed (the so-called "VINEX"-locations); this effect will be larger among the cattle farms and in the greenhousing sector, but may also be present in the arable sector; also land might have been sold to nature conservation organisations. Without the CAP compensation system, the smaller farms would have vanished by selling all of their land to other, larger units. With the premiums they could become "part-time farmer" and gain income from other activities. This is relatively easy in the arable sector as compared to the dairy sector. However, as no special investigations were done (the subject falls beyond the set aside evaluation), these reasons remain speculative, although the phenomenon certainly deserves further investigation within the framework of the CAP.

1.5 Irrigation

Normally, no irrigation of arable land takes place in the Netherlands. The reverse problem, draining, is more frequently met. Only in longer periods of drought, land is drained upon, mostly by means of mobile installations.

1.6 Arable products

The principal arable product, measured in ha, is ensilage maize, as used for fodder. Almost one third of the total arable area is used for this crop, not only on arable farms, but also (especially) on mixed farms. The first cereals crop, wheat, enters on the 4th place, with 13% of the area.

Illustration 1.9 Breakdown of arable land by product

	1992	1999	1999
	ha	ha	%
Maize (ensilage)	217 525	230 746	29%
Potato	187 325	179 805	22%
Beet	123 309	120 739	15%
Wheat	126 892	102 779	13%
Barley	34 092	58 293	7%
Maize (corn)	10 373	22 006	3%
Onions	14 183	19 682	2%
Flax and Hemp	4 727	4 903	1%
Rye	6 207	2 652	0%
Oats	3 646	2 518	0%
Triticale	2 367	1 835	0%
Rape-seed	4 234	1 319	0%
Peas	4 758	942	0%
Field Beans	1 670	648	0%
Other	63 351	53 354	7%
total	806 651	804 220	100%

Source: National bureau of Statistics

Within the arable sector, the COP products have a share of less than 25% in the production (in tons), the main other products being potato and beet. This share has grown, both in absolute and in relative terms during the period 1992-1999. In the same time, the share of COP crops in the total arable area increased from 51% to 53%, mainly due to an increase in cereals area (both wheat and ensilage maize contributed to this growth).

Illustration 1.10 Arable production in tons⁶ and in ha

	1992	1999	1992	1999
	tons		ha	
Cereals incl. all maize	19%	23%	50%	52%
oilseeds	0.1%	0.0%	0.5%	0.2%
protein crops	0.2%	0.1%	0.8%	0.2%
-total COP	19%	23%	51%	53%
Other arable products	81%	77%	49%	47%
total	100%	100%	100%	100%

Source: National Bureau of Statistics

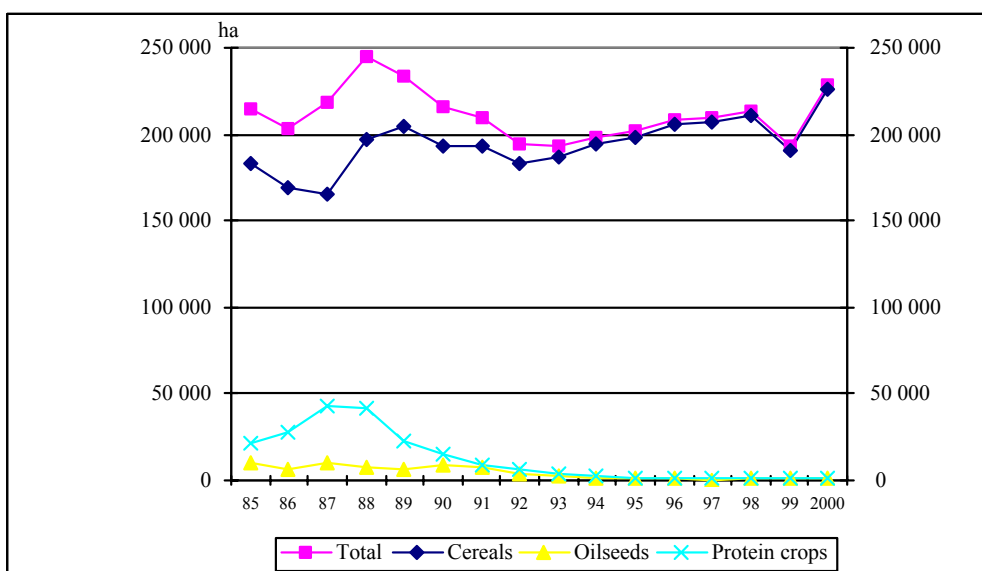
⁶ 1 ton = 1.000 kg

1.7 Development of COP production

Illustrations 1.11 and 1.12 show the development of COP crops over the period 1985-2000. Two comments can be made on these graphs.

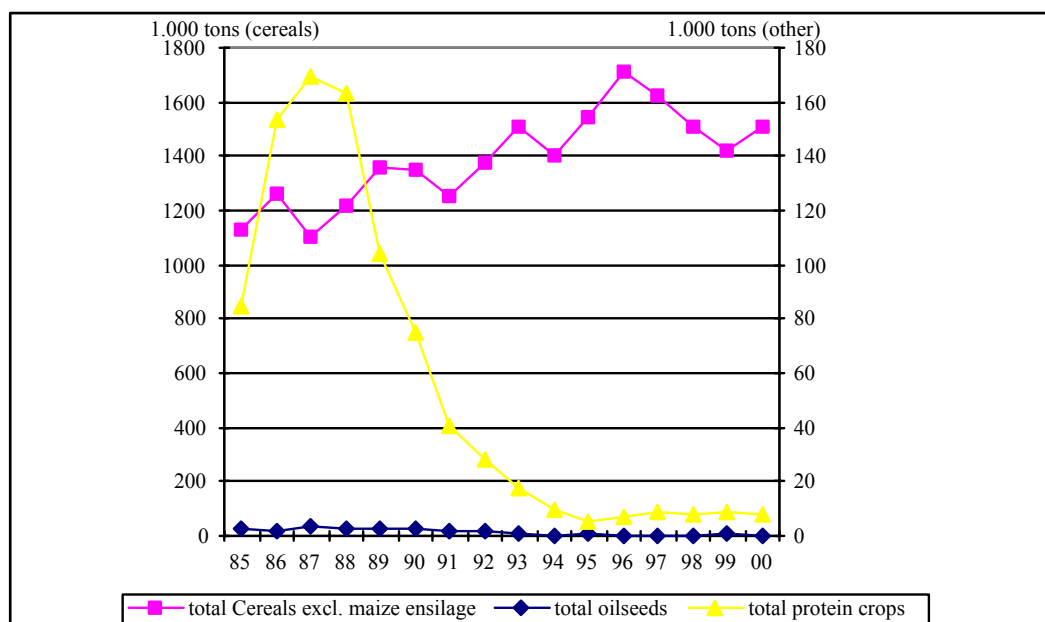
- the area of protein crops, notably peas, has decreased considerably in the period before the CAP reform
- the year 1999, following the wet season of 1998 shows a clear, but temporary interruption in the long period of gradually increasing COP area starting in 1992.

Illustration 1.11 Development of COP crops (excl. ensilage maize), in ha



Source: National bureau of Statistics

Illustration 1.12 Development of COP crops (excl. ensilage maize), in tons



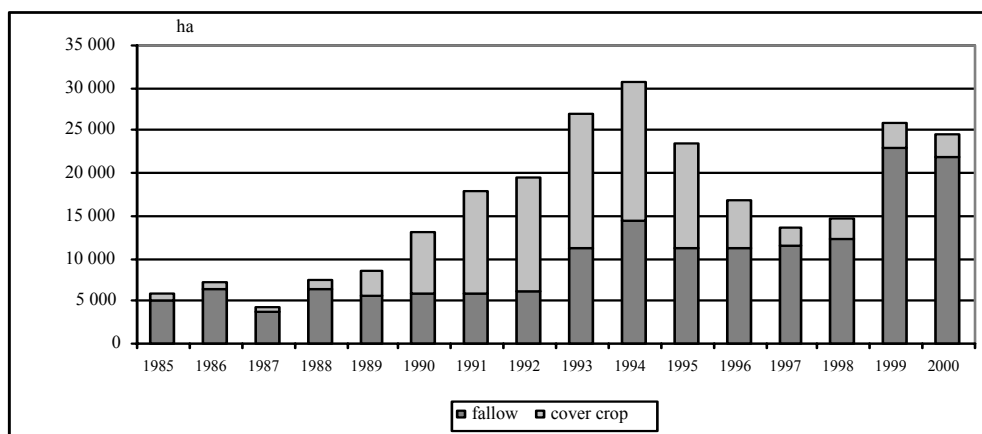
Source: National bureau of Statistics

1.8 Development of fallow

Up to 1992, the total amount of (bare) fallow land fluctuated between 4.000 and 6.000 ha. In 1993, a significant increase took place to a level of 11.000 ha - 14.000 ha. In fact, the land set aside on fallow was more than doubled. In 1999, this amount doubled again, to 22.000ha - 23.000 ha. . Generally speaking, there is a “natural” level of about 6.000 ha of fallow. All set aside above this level must be attributed to community regulations.

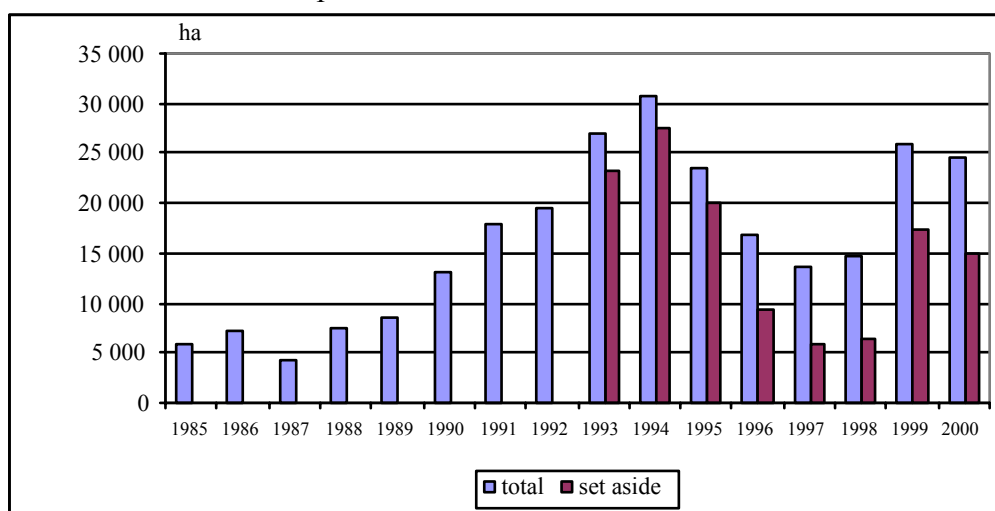
Since in national statistics, land set aside according to set aside regulations, covered with a fertilising cover crop is counted separately, this area has been added to the figures given above. This area has also increased, from well below 10.000 ha until 1992 to more than 15.000 ha in the period 1993-1994. These figures are included in illustration 1.13 and explained in Annex 5.

Illustration 1.13 Development of fallow land in the Netherlands, 1985-2000



Source: National bureau of Statistics

Illustration 1.14 Development of fallow and set aside area

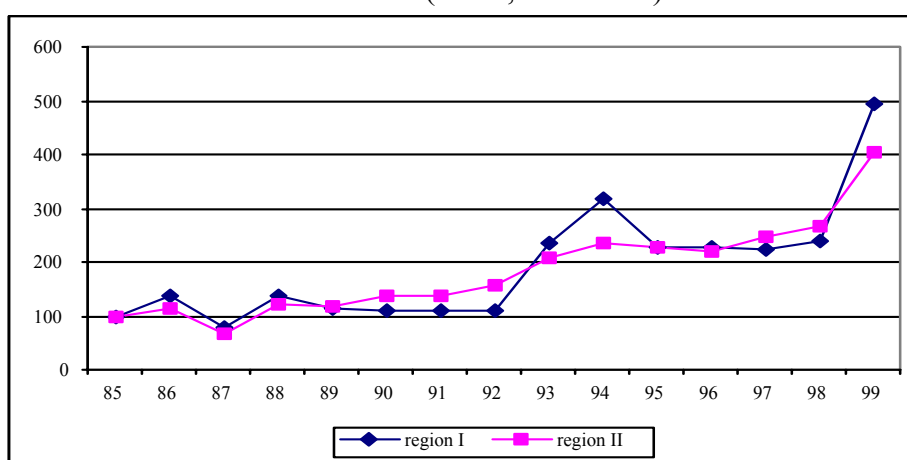


Source: National bureau of statistics, EU, Laser

In the Netherlands, 2 production regions for the COP crops are distinguished (region I and region II, see illustration 1.1). For the period 1992-1999, the set aside under the regulation is always administered for the regions separately. For previous years, these regions didn't yet exist. However, from the definition of the regions, the fallow data given above can be assigned to the two regions *ex post*. From these data, no diverging development between the regions is shown, see illustration 1.15.

The different development in the period 1989-1992 could be described to the 5-years set aside (sometimes with wood covering), which was more natural to the conditions in region II, whereas the steeper increase in the period 1993-1994 could be attributed to compulsory set aside which was more effective in region I with its larger areas of cereals.

Illustration 1.15 Development of fallow in the 2 production regions in the Netherlands (index, 1985=100)



Source: National bureau of Statistics, integration: Terp

1.9 Application of the set aside measures

Illustration 1.16 shows the relevant data for the set aside measure in the Netherlands. Data for the 2 regions are given in the appendix (where available)

The Netherlands	1993/94	1994/95	1995/96	1996/97		1997/98		1998/99		1999/2000	
Base Area	436500	436500	436500	436500		436500		436500		436500	
Compulsory set aside rate	15%	15%	12%	10%		5%		5%		10%	
Compulsory set aside minimum (ha)	7717	13042	10524	8565		4762		4960		11291	
theoretical voluntary set aside (ha)	98	880	1290	870		1098		1119		1119	
Number of applications (general scheme)	1101	2352	2158	2253		2826		2974		3922	
SCOP (ha) (COP + set aside, both schemes)	333455	375681	377751	384846		395764		391566		394114	
SCOP (ha) (COP + set aside, general scheme)	51444	84284	81726	85651		95235		99203		112914	
SCOP (ha) simplified scheme	282011	291397	296025	299195		300529		292363		281200	
Real set aside (set aside/SCOP both schemes)	2.34%	3.71%	3.13%	2.45%		1.48%		1.55%		4.40%	
General set aside (set aside/SCOP general schemes)	15.19%	16.52%	14.46%	11.02%		6.15%		6.13%		15.37%	
Total set aside (ha)	7815	13922	11814	9435		5860		6079		17350	
- of which rotatif (ha)	7815	12325	9375								
Total set aside (ha) other than extraordinary	7815	13922	11814	9435		5860		6079		17350	
- of which compulsory	7815	13922	11814	8457	90%	4701	80%	4886	80%	10544	61%
- of which voluntary				978	10%	1159	20%	1193	20%	6806	39%
-of which paid at 48,3 ecu/ha				97	1%	25	%	275	5%	91	1%
-of which not compensated					%	34	1%	12	%	15	%
-of which non-food	707	1096	643	479	5%	157	3%	137	2%	132	1%
5-years set aside (R.2328/91)	15375	13514	8149								
Extraordinary set aside											

Source: EC, Laser

Illustration 1.17 Some details of the regionalisation plan

	production region	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
Base Area (ha)	I+II	436 500	436 500	436 500	436 500	436 500	436 500	436 500
Standard yield (ton/ha)	I	7.11	7.11	7.11	7.11	7.10	7.10	7.10
	II	5.06	5.06	5.06	5.06	5.00	5.00	5.00
Compensation (Euro/ton)								
set aside	I	386.49	489.37	489.37	489.37	488.46	488.46	488.46
	II	274.96	348.25	348.25	348.25	344.15	344.15	344.15
cereals incl.maize	I	214.41	300.45	386.49	386.49	385.57	385.57	385.57
	II	152.96	213.96	274.96	274.96	271.31	271.31	271.31
oilseeds	I	670.09	670.09	670.09	670.09	669.18	669.18	669.18
	II	477.08	477.08	477.08	477.08	471.16	471.16	471.16
protein crops	I	558.11	558.11	558.11	558.11	557.19	557.19	557.19
	II	396.96	396.96	396.96	396.96	392.40	392.40	392.40

Source: EC, Laser

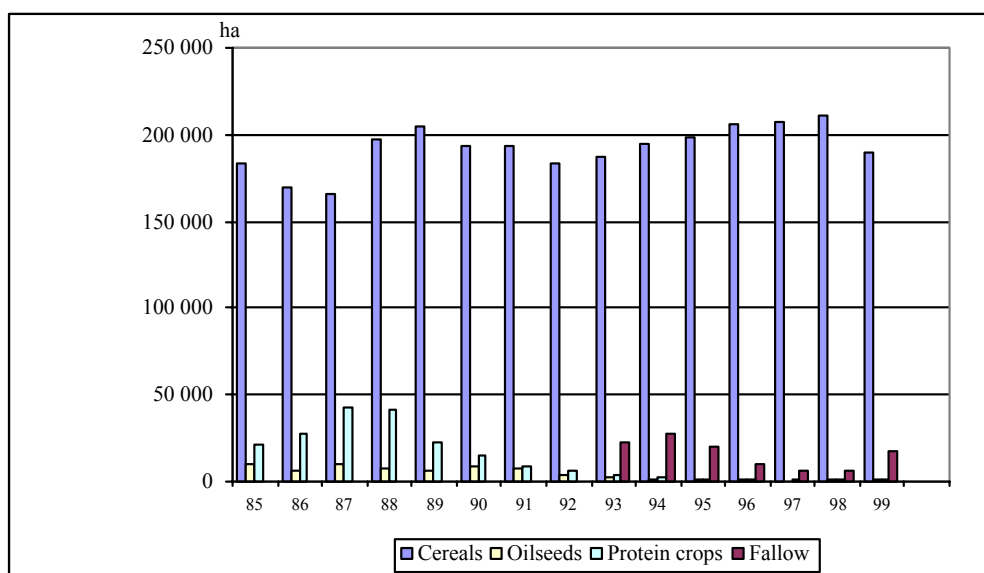
2. Questions concerning effectiveness

In this section results are given from the national/regional survey and the interviews with the farmers. These results may be helpful for the final analysis of these evaluation questions, of which the emphasis is on the community level.

2.1 Question 4.1.1 Did compulsory set aside and voluntary set aside measures contribute significantly the arable crop supply control? what is their contribution in particular in reducing of surplus cereal?

The total area of COP crops (excl. set aside) was 192.992 ha in 1993 and 193.248 ha in 1999. In between, small fluctuations of max. 5% have taken place, first an increase followed by a decrease. The total amount of COP+set aside area decreased in the same period from 216.438 ha to 210.342 ha, (these data include some set aside in the years 1993-1995 remaining from 5-years set aside contracts).

Illustration 2.1 Development of COP crops area and set aside (5-years and 1765/92) (excl. ensilage maize)

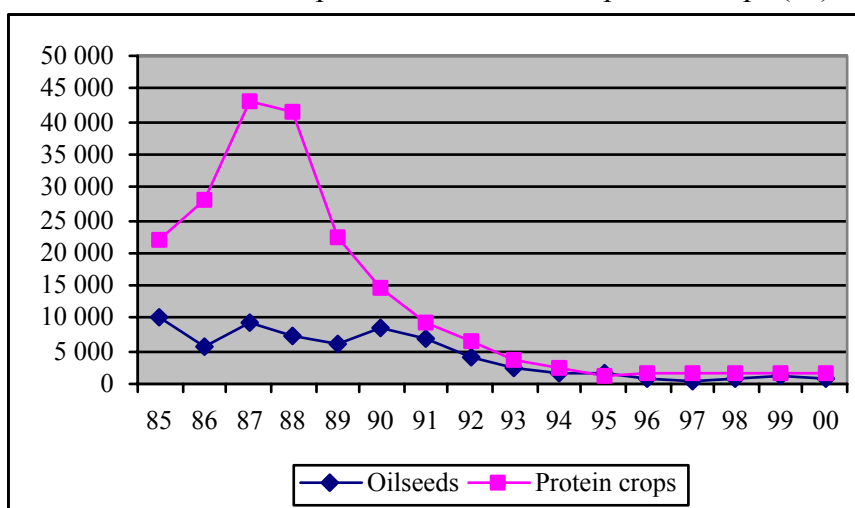


Source: National bureau of Statistics

In illustration 1.12, the development of production for COP crops was presented. Whereas protein crops show a continuous decrease from 1988 onward, cereals (mainly wheat), show a fluctuating, but unmistakably upward trend. It should be noted, that in 1996, when the set aside rate was 10%, the production was at its top, whereas in the following year, when the set aside rate was 5%, the production decreased. From this fact, and from the overall shape of the graph, it must be concluded, that the effect of set aside on production control is not supported by facts.

Oilseeds and protein crops show a more or less continuous decrease in area, starting before the CAP reform, with no particular acceleration of this downward trend in the period 1993-1999.

Illustration 2.2 Development of oilseeds and protein crops (ha)



Source: National bureau of Statistics

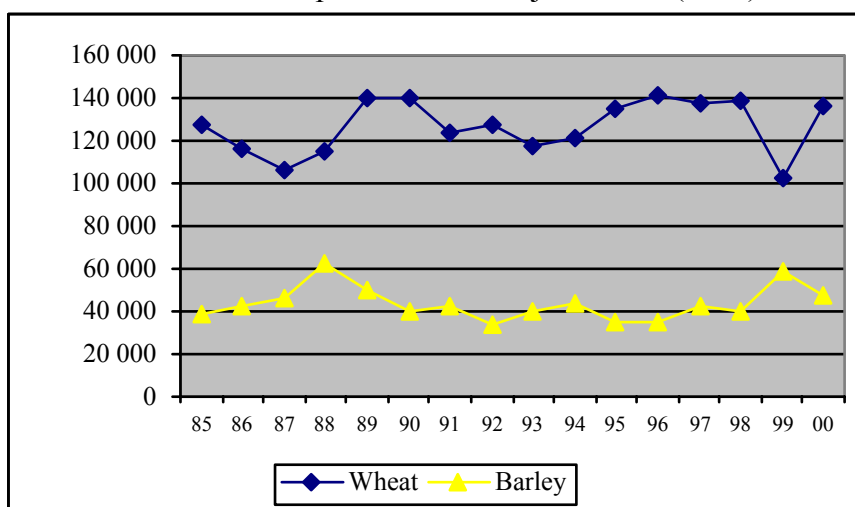
From the available data is clear that there is no evidence, that the measures have contributed significantly to the arable supply control. If there has been a decrease, it has been compensated by an enlargement elsewhere.

For the cases in particular of cereals, the following additional information can be given. Wheat is stable or slightly increasing (except for the year following the wet period). The same hold for barley (with a slight increase, possibly a substitution effect, in 1999). Two minor cereals, rye and oats, show a slight downward trend. For rye, however, in 1999 the same level as in 1988 was reached. This can not be called a significant contribution.

So finally, the only cereal species for which a decrease to a lower level has been reached in the period 1992-1999 is oats.

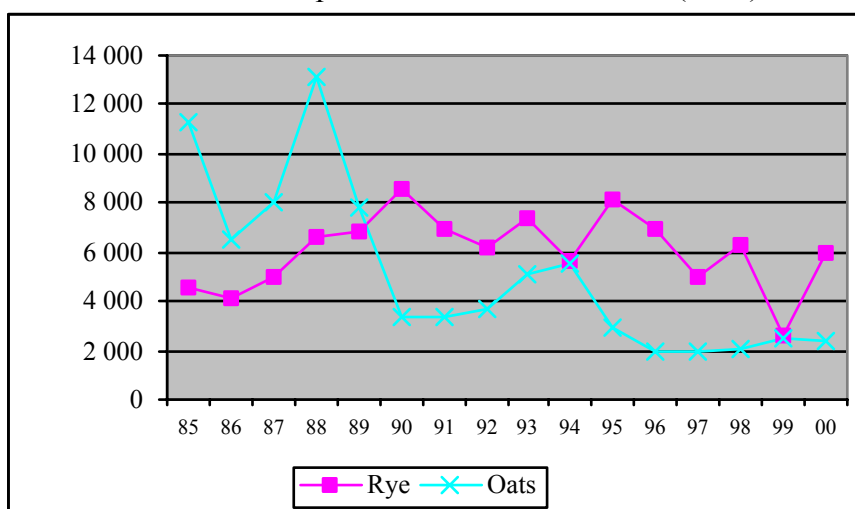
The overall conclusion must be, that the data do not indicate a significant impact on the reduction of the area of cereals in the Netherlands.

Illustration 2.3 Development of two major cereals (in ha)



Source: National bureau of Statistics

Illustration 2.4 Development of two minor cereals (in ha)



Source: National bureau of Statistics

2.2 Question 4.1.2 In what proportions has the remuneration of the voluntary set aside strengthened the effectiveness of the set aside instrument ? Estimate the share of the voluntary set aside areas which would have been unproductive in the event of absence of the measure.

Concerning the effect of voluntary set aside, we remark, that the majority of set aside (normally 80%-85%) is not voluntary. Therefore, *a priori*, the effect of voluntary set aside is small. Only in one year, 1999/2000, voluntary set aside was 40% of the total set aside, for special reasons (see below).

Farmers' strategies tend to minimise voluntary set aside. Prior to the CAP reform, few farmers said to have land set aside. No special parcels are designated for voluntary set aside. The most frequently mentioned reason to set aside more than the obligatory 10% (or whatever rate holds for the given year) is the geometry of the parcels, the so-called "rounding up" (the second reason is to anticipate a sanction in the case of discussion about the measure of a parcel; in the survey, 34% of all farmers practised this way of set aside). Thus it follows, that there is no distinction between voluntary and compulsory set aside land and hence that the effect of voluntary set aside to the supply control is in general a rounding up effect with a magnitude of about 15%-20%. Since the size of the parcels is not depending on the set aside rate, the effect of voluntary set aside is expected to be relatively smaller if the compulsory set aside rate is higher, as farmers have more possibilities to pick up a combination of parcels that is closest to the predefined rate. This is confirmed by the data (see illustration 2.5)

Illustration 2.5 Voluntary set aside rates and compulsory set aside rate

Year	Set aside rate	Voluntary set aside as a % of total	Voluntary set side in ha
1996/97	10%	10%	978
1997/98	5%	20%	1159
1998/99	5%	19%	1205
1999/00	10%	39%	6806

There is one exception: the season 1999/2000, mentioned above. The autumn of 1998 was a very wet period, with catastrophic impact, both on the harvest and on the quality of the soil. The next season, many farmers (as it follows from the survey) expected a low yield on their land in general. They picked out the worst parcels (not especially on fertility but on draining) to use them for set aside. As they expected the income from these parcels in that situation

to be low, they were less thrifty than in previous years to set them aside, as they calculated that the physical recovery added to the set aside premium might compensate the loss of a reduced yield. From this effect, it follows that even in this situation, the effect of voluntary set aside on the control of production was moderate; indeed, if the extra surplus set aside area had been used for cereals, the production would have been less than average anyway.

The same could be said of small COP farmers, who otherwise would have registered under the simplified scheme. In extreme situations, they sometimes enter the general scheme, for example by shifting a parcel of potato land to wheat, thereby voluntarily exceeding the 92 ton criterion and entering the general scheme with compulsory set aside. In the survey, 18% of the small farmers showed this behaviour. As these situations are exceptional, a reliable estimation of the effect is hardly possible, except that it is small.

The reasons for farmers to do voluntary set aside are according to the survey among 30 farmers:

- anticipation to prevent a sanction (37%)
- rounding up to whole parcels (40%).

The only other reason could be called "occasional set aside", notably an extremely wet season or private circumstances (road construction, moving to a new farm).

The overall conclusion is, that the effect of voluntary set aside is rather restricted. In normal years, voluntary set aside is in the order of 1.000 to 1.200 ha for the Netherlands a whole. Of this amount, only a small part would have been unproductive anyhow.

One exception concerns organisations like Countryside Protection Foundations, one of which was in the survey. For such an organisation, yield from cereals on their parcels is not the primary objective and voluntary set aside can be substantial.

2.3 Question 4.1.3 To what extent was the set-aside instrument determining in the non-food crops production trend

For the Netherlands, non-food production on set aside land is a small and decreasing part of the total set aside. In the first season , 1993/94, it was less than 10% of the total set aside area, whereas in 1999/00 only 1% was left (see illustration 2.6).

Illustration 2.6 Development of non food area on set aside land

Year	non-food on set aside land	
	ha	% of total set aside
1993/94	707	9%
1994/95	1096	8%
1995/96	643	5%
1996/97	472	5%
1997/98	157	3%
1998/99	137	2%
1999/00	132	1%

Source: EC, Laser

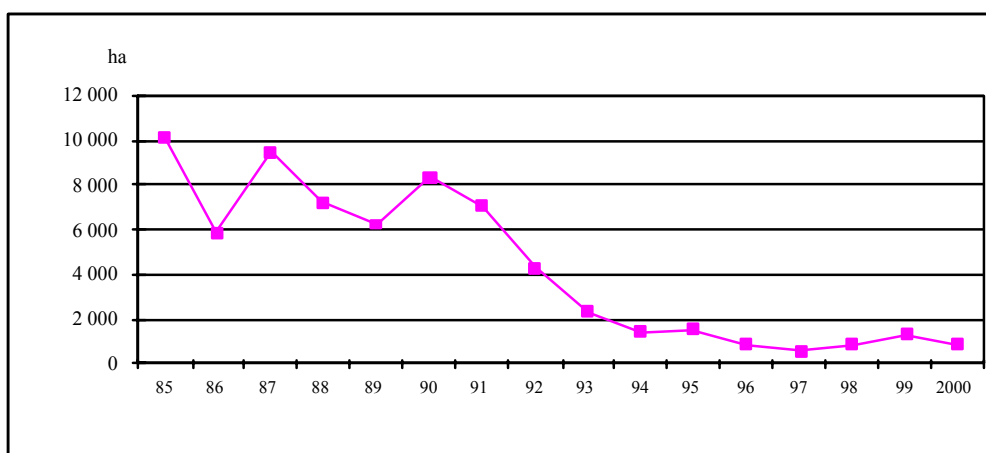
This picture is confirmed by the survey among farmers; it appears, that in the beginning of the CAP reform, (some) farmers were attracted by the possibility to grow non-food on set aside land. Reasons mentioned were:

- fitting into (and not disturbing) rotation scheme
- revenue
- combination with food crop (especially rape-seed)
- ethical reasons: land must be productive
- psychological: acceptance of set aside.

So, in the beginning, in principle there might have been some effect of the set aside measure on non-food production. The effect, if present, must be small. In illustration 2.8, the development of the major non-food crop is shown, notably rape-seed over the years 1985-2000⁷. Rape-seed is the most frequently mentioned non-food crop (by 100% of the survey farmers who had non-food set aside); there is no particular increase in the production at the beginning of the period 1993-1999. The decrease in rape-seed area, starting at 1991 with the falling market prices, continued (with some fantasy, one might argue, that the slope would have been a little steeper without the set aside measure). Furthermore, it must be remembered, that in the illustration no distinction is made between food and non-food production of rape-seed. Since a shift from food to non-food production of this crop is not supported by evidence from the survey, it must be concluded, that as far as rape-seed is concerned, there is no permanent effect of the set aside measure.

⁷ Other non food crops mentioned are oilseed rape and miscanthus

Illustration 2.7 Development of the major non-food crop rape-seed, 1985-2000



Source: National bureau of Statistics

As it was seen, the amount of non-food area steadily decreased in the period 1993-2000. The reasons mentioned by the farmers in the survey are:

- falling rape-seed prices
- rape-seed is difficult to combine with potato culture in following years
- unfamiliarity with other non-feed crops (no experience, possibly not the proper equipment)
- from an agricultural point of view a simple cover crop would have the same result on the soil
- administrative and financial complications: non-food sale must be documented carefully by the first buyer⁸ of the product up to the final processor; the market for non-food crops in the Netherlands itself is small and an economy of scale cannot be reached; only one or two buyers were active in the beginning of the period, but in the course of the 1992-1999 period, they terminated their activities in this field, as it was regarded too cumbersome. Therefore, for the individual farmer, only export is left, which is too complicated. Both for the farmers and for the implementing organisation, the costs and the efforts are considered disproportional.

For these reasons, especially the last one, farmers who produced non-food crops in the beginning, gradually have stopped the activity. Some farmers, however kept experimenting with non-feed, more or less as an additional activity arising from their personal attitude and interest.

⁸ who has to be a registered trader for non food products

Furthermore, we have observed, that non-food/non-feed application for set aside land is in some respect a controversial issue. On the one hand, there are farmers (in the survey) who consider non-food cultivation as a good substitution for COP crops and as a realistic perspective for the agricultural sector, that needs further stimulation. On the other hand, we have heard the word "ridiculous" with respect to non-food production on land that can be used for human and animal food production.

Our overall conclusion is, that – apart from a possible transient effect in the first few years – the set aside measure has no effect on non-food production in the Netherlands.

3. Questions concerning efficiency

- 3.1 Question 4.2.1 Is the budgetary cost of the instrument justified in relation to the noted effects? Estimate what it would be if the set-aside were not remunerated (counterfactual situation 1). Estimate what it would be if the set-aside had been remunerated according to the original proposal of the Mac Sharry reform (counterfactual situation 2). Estimate any different counterfactual situation arising logically from the analysis tool used to the questions 4.1.**

This question will be answered at community level only.

- 3.2 Question 4.2.2 Is the impact of the compulsory set-aside rate and of the payment level on the large producers income likely to amend their crop choice so as to answer better the requests of the market?**

Synthetic answer

First, it must be remembered, that set aside premium is at most 15% of the compensatory premiums as a whole. Therefore, the effect is necessarily limited. Agricultural factors, *i.e.* soil potential (50%) and yield (42%) dominate the choice of crops. In the case of large farmers, the majority (67%) made no change in rotation scheme. Both increase and decrease in COP-crops occur; in the case of a decrease, product price is the driving factor, rather than set aside factors. For smaller farmers, there is some evidence, that the combination of compulsory set aside and premiums has induced a tendency to amend their crop choice so as to answer better the requests of the market.

Details of the answer

As a criterion for large producers, we take a production level of 3 times the reference level corresponding to 92 tons in the principal production region (region I), corresponding to 39 ha. Then, 40% of the farmers cultivating 64% of the COP area are "large".

67% of these farmers in the survey declared that their income could not be maintained at the same level as before 1992, 92% said that the set aside premium was indispensable. So, according to the farmers in question, the

compensation, including the set aside premium, was insufficient to maintain their income. At the same time, it is clear, that the set aside premium is only a (small) part of the total amount of compensation payments. For the farmers in the survey, the average set aside compensation was about 15% of the other COP premium. In fact, farmers often say, that they consider set aside as an "investment" in obtaining the premiums for COP-crops. This makes a distinction between the specific effect of the set aside compensation payments difficult.

From the interviews, the general argument to shift to other than COP crops is the market price for wheat, rape-seed (and peas). If payments play any role, it is not the set aside premium, but more likely the cereals premium, which is felt as to become more and more insufficient to compensate for the fallen wheat price.

A shift of production is not predominant with the large farmers; 25% of them indicated that they had changed their cultivation system for reasons related to the CAP, which means that a large majority did not substantially rearrange their activities for that reason. Also, the majority (67%) of the farmers has made no change in their rotation scheme.

The shift in crops grown by the surveyed large farmers (including those who changed, but without a relation to the CAP) is in general in the direction of less production of COP crops: 17% grow less cereals, 25% less oilseeds and 25% grow less peas nowadays as compared to the years 1992/1993.

Illustration 3.1 Changes in activities (% relative to the group of farmers)

Activity	Increase of activity			Decrease of activity		
	Group of farmers			Group of farmers		
	Small	Large	Total	Small	Large	Total
Cereals	–	33%	14%	35%	17%	28%
Oilseeds	6%	–	3%	6%	25%	14%
Protein crops	6%	–	3%	12%	25%	17%
Non-COP	47%	33%	41%			
Non-agricultural	12%	17%	14%			

On the other hand, 33% of the large farmers grew more cereals (other COP's were not increased). Also, 33% started or increased non-COP crops, mainly potato or beet.

Furthermore, the choice of the cultures is primarily determined by agricultural circumstances (50%) and secondly by yield (42%). In practice, this means, that

- either farmers liked to grow potatoes, but the obligation of rotation in potato cultivation forces them to grow a substantial amount of cereals as well
- or the structure of the soil (heavy clay) permits only cereals or similar crops.

We conclude, that in the case of large farmers, there is a small tendency to decrease activities in the COP crops. The relation with set aside however is questionable. According to our findings among farmers, the effect of falling wheat prices and insufficient compensation is predominant.

In contrast to large farmers, small farmers seem to be more flexible and use more opportunities to change their cultures: 47% of them have increased non-COP crops. Especially crops with a more horticultural character, like sprouts, chicory, tinning peas and spinach are mentioned as substitutes. It is also clear, that more small farmers than large farmers have decreased their cereal area: 35% as compared to 17%.

Some (small) farmers explicitly stated, that in one or more years they had decreased their cereals area so as to produce less than 92 tons. In that case, one may conclude, that there is indeed an effect of the compulsory set aside rate and the compensation premiums on the attitude of farmers directed towards better responding to the market. Especially farmers on the edge of the 92 tons criterion decide from year to year how many ha of COP crops (*in casu* wheat) they will grow. However, this effect must not be exaggerated, as it is an *ex ante* calculation, made with rough input data; furthermore, farmers do not tend to change their habits drastically, unless there is an obvious gain.⁹. Nevertheless, as a general tendency, the effect is there.

We conclude, that in the case of smaller farmers there is some evidence, that the combination of compulsory set aside rate and the payment level has directed at least some of them so as to reduce the amount of cereals grown.

Concerning the question of other markets, a shift towards potatoes and horticultural crops is visible, at least among the farmers surveyed.

⁹ One farmer, for example, had registered under the simplified scheme in the first years of the Mac Sharry system, until his accountant pointed out, that the general scheme with set aside would be more profitable in his actual situation. Of another farmer (not in the survey), it was said that he didn't register under any system for principal reasons.

According to the national data a large increase in a smaller crop like chicory can be seen. For this product, the amount is relatively small and the ha are not counted each year separately in the statistics, but in the general “other crops”. From 1990 to 1995 however, an increase from 25 ha to 2722 ha has been recorded.

Meeting quality standards set by trade organisations becomes more and more common. At the moment, 75% of the large farmers declared that they were participating in quality programs (COP crops, but also potato and horticultural crops), while others said that this would be done in the near future. Tracibility is somewhat less developed yet (58% of the larger farmers), but also with an upward trend. For smaller farmers, who grow relatively more non-COP crops, tracibility is more often met (71%), as a consequence of their supply to the tinning industry.

4. Questions concerning the regional impact and concerning the agronomic practices

4.1 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?

Synthetic answer

The influence of remunerated set aside as such on good crop rotation is very limited. Set aside is almost 100% rotational and the rotation scheme is determined mostly by agricultural reasons. Alternative crops were not industrial crops, but fertilising cover crops. From the application of the set of allowed cover crops as well as the consciousness-raising effect of the set aside measure, some positive effect may have resulted.

Details of the answer

Firstly, it must be noticed, that set aside in the Netherlands is almost completely rotational: 96% of the set aside land in the survey is involved in an annual¹⁰ rotation scheme. Only 4% is fixed. The reason given by the farmers is, that every parcel of ground is valuable and a permanent set aside would be a waste. The selection of parcels for set aside is therefore normally not made on the properties of the parcels themselves, but on the rotation scheme for the crops grown. In practice, this means that parcels with several years of wheat culture or potato parcels are chosen. Especially former potato ground is preferred, as wild shoots can be managed better on set aside land than on land cultivated with cereals. Also heads of parcels are being selected (if they are sufficiently large so as to satisfy the requirements).

Illustration 4.1 A breakdown of farmers by type of set aside

Type of set aside	% of farmers
100% rotational	91%
100% fixed	3%
mixed	6%

¹⁰ Exceptionally biannual

The system of incorporating set aside in a rotation scheme is confirmed by the fact, that the majority of farmers (in the survey) did not change their usual rotation scheme of crops: 79%. In fact this is an underestimation, since two of the farmers were obliged to change their scheme as a consequence of a removal, not related to the CAP.

Nevertheless, we estimate that the enforced set aside has some positive effects on the rotation scheme (including set aside). In the first place, farmers who used green fallow (the majority) were obliged to use one of the permitted cover crops and to maintain the grounds according to the regulations. It can be argued, that this is a better rotation than using different species of productive crops or plain grass. Secondly, the system makes farmers conscious that non-traditional crops may be of use in a rotation scheme. This latter effect is not predominant, since farmers generally know well by tradition and experience what is best for their land. We therefore estimate that in about half of the cases, there is a (slight) positive effect, see illustration 4.2.

Illustration 4.2 Effect of set aside on rotation in the Netherlands (estimated)

Type of effect	% of farmers classified
Negative impact	3%
Neutral impact	43%
Positive impact	52%

With respect to alternative crops, the production of non food has been dealt with extensively in section 2.3

Most of the set aside land is covered with some crop; 21% of the farmers in the survey declared that they had bare set aside¹¹; one third of them had also a cover crop on other parcels, while another third did bare fallow one year only. In total, 86% of the farmers grow crops on their set aside land with an agricultural aim. A popular cover crop is *Raphanus sativus*, but also grass/clover mixtures are used. For farmers with voluntary set aside, this rate is slightly higher (90%) than for non voluntary set aside farmers (84%).

¹¹ among them only one farmer with voluntary set aside

The majority of farmers (72%) had no difficulty in managing the set aside land. The 28% who had problems in the beginning reduced to 17% in 1999. The main problems are:

- weed control (40% of the problems now)
- statutory period of set aside (40% now).

The problem with the period is mainly the fact that for farmers cultivating sprouts, the date of 15 march, by which the parcels must be set aside, gives problems when winter is long or spring is cold. Under those circumstances, part of the previous crops (sprouts) is still on the field at the moment that the parcel should be cleared for set aside.

4.2 Question 4.3.2 Did the location of the plots set aside in use encourage better cultivation methods ?

Synthetic answer

Set aside is almost purely rotational in the Netherlands; therefore there is no particular location of set aside parcels. Consequently, there is no particular (positive or negative) effect.
In the case that soil improvement was used as a reason for selecting a parcel to set aside, it can be argued, that this has been a temporary improvement of cultivation (but not necessarily of cultivation methods).

Details of the answer

As 96% of the set aside area in the Netherlands is rotational, there is no particular location of set aside. The rotation scheme of the cultivation determines the parcels and in principle, every parcel eventually gets its turn. For those farmers with fixed set aside or mixed set aside, the determining factor is fertility or size, see illustration 4.3.

Illustration 4.3 Location of parcels set aside

Location of parcels	% of farmers
use of rotational fallow system	97%
along water courses to avoid erosion and leaching of nitrates	-
on unviable (too small) fields	3%
on distant or isolated fields	-
on least fertile or non -irrigated fields	10%
on sloping fields	-
on extensively cultivated field or margins	-
acquisition of fields specifically to be set aside	-
Transfer of set aside (by the same farmer from one production region to the other)	3%

A matrix has been used to characterise the farms according to economic and agricultural gain or loss in relation to set aside; among the factors, location of parcels is one factor. Other factors are rotation schemes, cover crops for fertility, the effect of soil improvement, etc. The result has some elements of arbitrary, since a full insight in the farmer's economic and agricultural position was not possible, let alone for a comparison in time. The result, however seems to be rather consistent with other element of the survey: no special economic effects (corresponding to the integration in the rotation scheme) and a positive effect on agriculture.

Illustration 4.4 Characterisation of farms according to economic and agricultural effects (% of farmers in the survey)

Aspect	Gain	Neutral	Loss
Economic	10%	90%	–
Agricultural	66%	34%	–

The overall conclusion is, that the direct economic effect is neither positive nor negative (within the circumstance that set aside is an indisputable fact with a negative effect on the farmer's income¹²). Farmers have very few possibilities to compensate the loss. On the other hand, it is likely, that set aside has a positive effect on agricultural activities.

¹² for a secondary negative effect, see 4.4.

4.3 Question 4.3.3 Did the existence of the remunerated compulsory set-aside cause production intensification in the other plots?

Synthetic answer

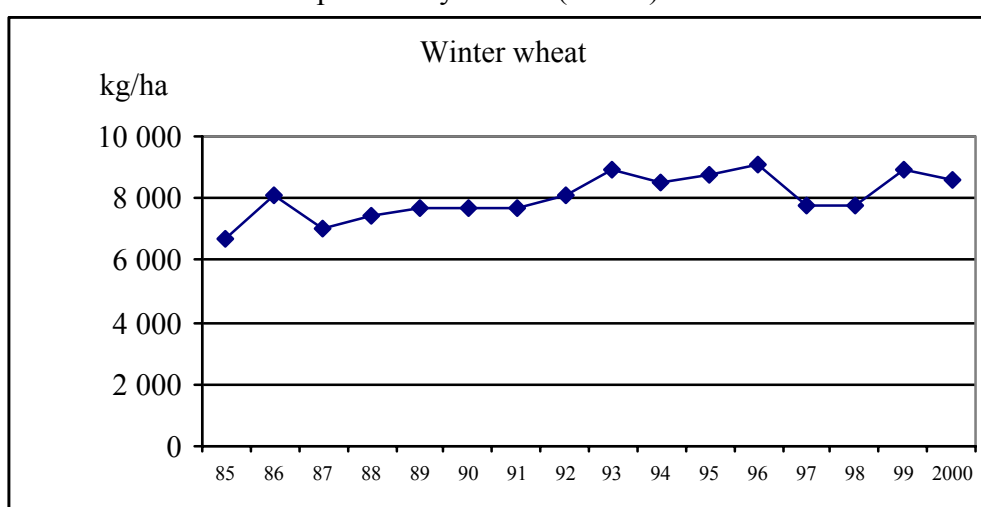
Neither the answers given by the farmers in the survey, nor the development of production per ha support the hypothesis that remunerated set aside has intensified production on other plots.

Details of the answer

In the survey, only 14% of the farmers mentioned an increase of production intensification on other parcels. This is a small amount and the real impact is uncertain. Some farmers mention a better soil condition after forced set aside.

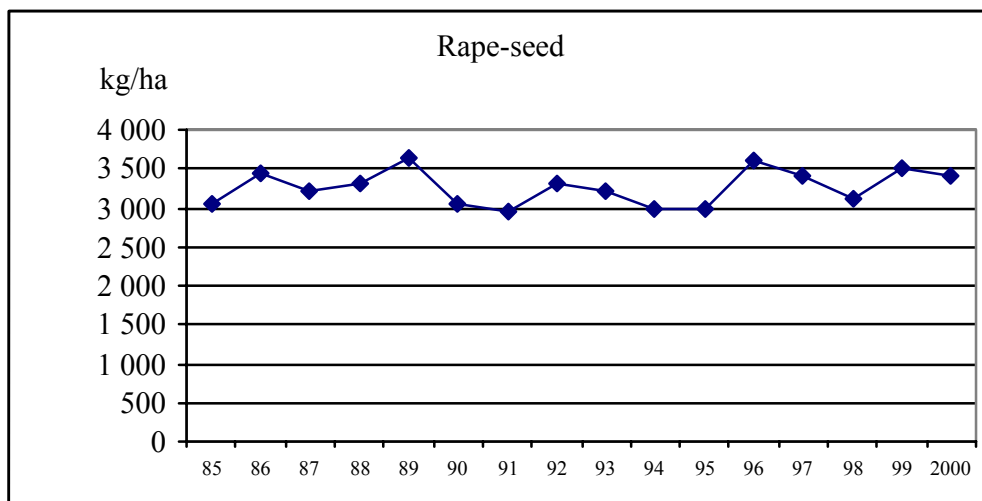
The data on the development of production (in kg/ha) do not support the hypothesis that production has increased categorically on other plots. In illustration 4.5, 4.6 and 4.7, the development of production has been shown for three major COP crops: wheat, rape-seed and maize. In the case of wheat, there is a slight but insignificant decrease in production in the period in the period 1992-1999 as compared with the preceding period. In the case of rape-seed, the production per ha was slightly decreasing in the previous years, whereas it became stable in the period after 1992. Only in the case of ensilage maize, a growing increase in yield can be notified.

Illustration 4.5 Development of yield for (winter) wheat



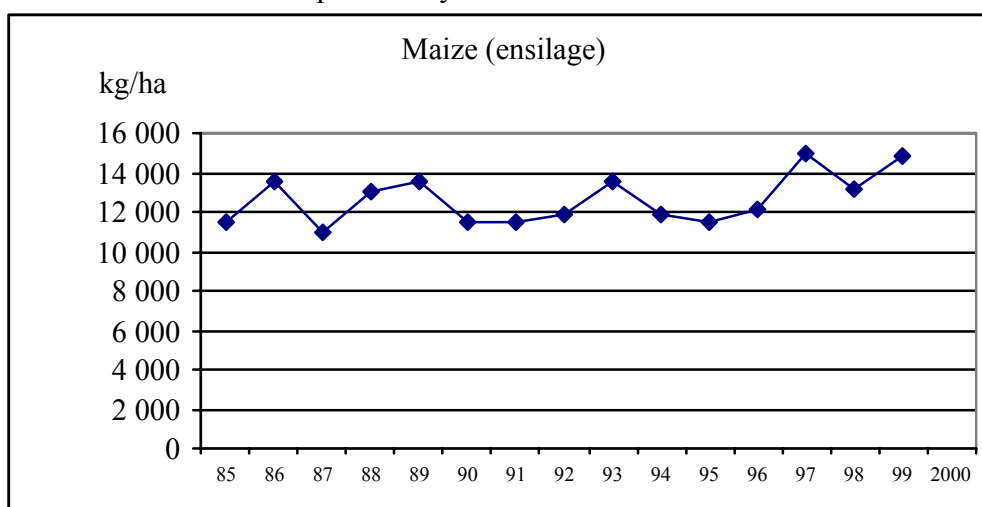
Source: National bureau of Statistics

Illustration 4.6 Development of yield for rape-seed



Source: National bureau of Statistics

Illustration 4.7 Development of yield for maize



Source: National bureau of Statistics

4.4 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

Synthetic answer

There is no evidence that compulsory set aside had increased competitiveness.

In a few cases in the survey, there was an increase in surface, but there is no relation to set aside. Land prices have increased considerably over the last 5 years, but again, there is no relation to set aside.

An influence mentioned by 20% of the farmers was the diversification to free products, notably potatoes, with a negative effect on prices. This can be interpreted as an unforeseen negative effect on competitiveness.

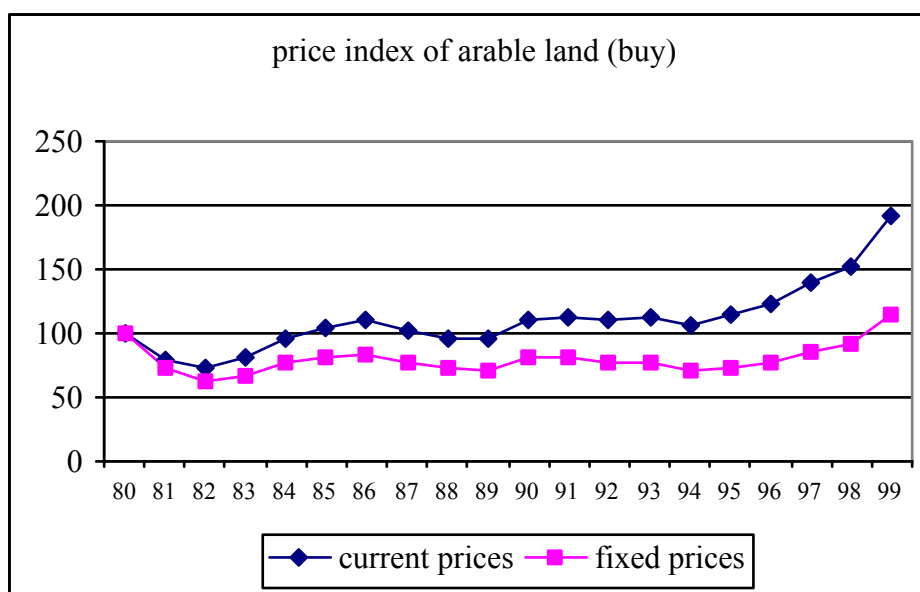
Details of the answer

One effect could be on the size of farms. From the survey, it follows that in the period 1987-1992 34% of the farmers had enlarged their property, whereas in the period 1992-199 this was 31%. This is all within natural fluctuations. In size, however, the average increase was 10,8 ha in the first period and 26,5 ha in the second. It must be mentioned, however, that the latter is heavily influenced by three farmers who moved from one location to another one, which was a growth by itself, while one of them temporarily kept two locations in use. In fact, these enlargements might be a gain in competitiveness, but it is also evident, that there is no relation at all with set aside.

With respect to acquiring new land, it is generally felt, that this becomes more and more a problem. 70% of the farmers mentioned that it was difficult to get new land, but none of them related this to set aside. The real factor is the increase in land price in the Netherlands in general, as agriculture suffers much competition from other land users like urbanisation, infrastructure, industrial sites and nature/ecology. Another effect that is mentioned, concerns acquisition of land by cattle farmers.

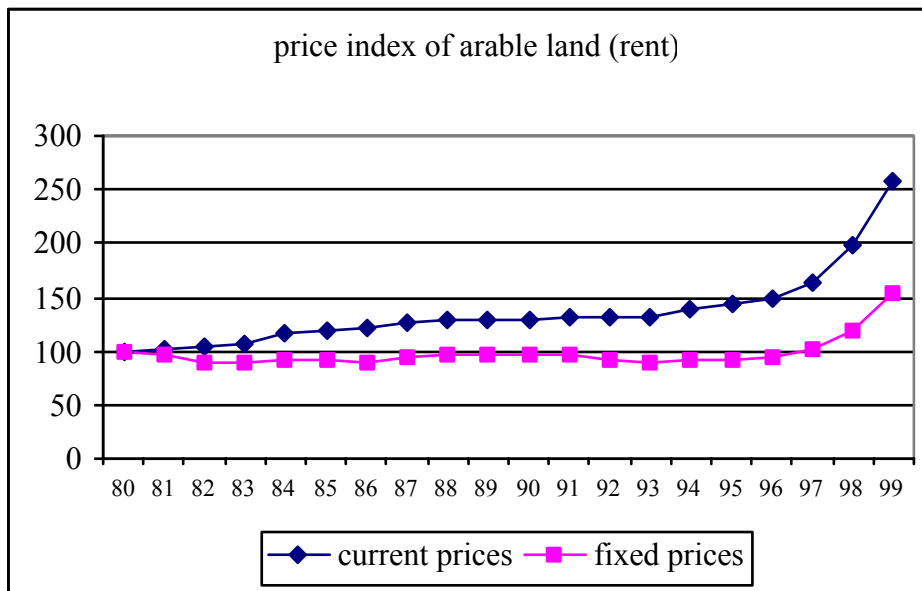
Illustrations 4.8 and 4.9 show the development of arable land price over a long period, both for bought land and for rented /leased land. Even after correction for inflation (using the consumer's price index), a remarkable increase is shown in recent years, starting about 1996. In particular for leased land, the prices are remarkably stable until 1996, when a steep increase occurs. This due to an institutional effect (a change in legislation permitting a larger annual change). From the data, no particular effect can be seen which could be attributed to the CAP. In fact, prices follow the market of real estate in the Netherlands. It should be noted, that there are large regional differences, according to the influence of the above-mentioned competing land users.

Illustration 4.8 Development of arable land prices (bought land);
1999 value: Euro 31.500 /ha



Source: National bureau of Statistics

Illustration 4.9 Development of arable land prices (leased/rented land);
base: 1980=100; 1999 value: Euro 490 /ha/yr



Source: National bureau of Statistics

There is no evidence of a special market for eligible land for Mac Sharry premiums or set aside premiums. One of the surveyed farmers, who happens to be a part-time real estate broker, declared, that there is a market for beet quota land, milk quota farms and manure quota, but not for COP-eligible land. Another fact, however, is the reference period. Land that was not arable land or land of which it cannot be proved that it was arable land is not interesting for arable farmers. This is sometimes a problem in a land consolidation situation.

One farmer mentioned that buying non-MacSharry land was not profitable. There is one sign of negative value for set aside land: the case of land with a long-term set aside obligation is considered less valuable than other land, as it cannot be used for growing crops for a longer period.

There is one signal that the CAP has increased competitiveness, although this seems not in particular related to set aside. In section 1.4 it was mentioned, that the decrease in the number of small farms stopped temporarily in the years 1993-1995. This can be seen as an increase in competitiveness for those farms that would have otherwise been obliged to terminate their activities. As it was said, the relation with set aside is uncertain.

On the other hand, there are signals of an indirect decrease in competitiveness:

- The potato market, mentioned by many farmers. Partly due to the set aside measure and partly as a consequence of falling wheat prices (the balance is unclear), farmers who could do so have diverted to other crops, notably potatoes. This has had a negative effect on the price of potatoes, not only for COP farmers, but also for other farmers. In fact, for the Netherlands as a whole, this is considered as a negative economic effect.
- a substantial fragment of the surveyed farmers (82%) indicated that they are not satisfied with the CAP; 33% of them would prefer a free market situation (free from any compensation or subsidies, world-wide). This can be considered as an indication, that they felt they would be more competitive without the system.

Taking all aspects into consideration, it must be concluded, that there is no evidence that compulsory set aside increased competitiveness of farms in the Netherlands.

Rather, there are some signals, that the system decreased competitiveness, although in that case the question remains: competitiveness with whom? (national, EU, OECD, world).

5. Questions concerning the environmental impact

The question of the regulations related to the national interpretation and implication of the environmental paragraph is a subject for the national part of the report. The same holds for literature references on the subject.

Farmers are well aware of the regulations concerning good management of set aside land in relation with environment. We estimate that this has to do with severe sanctions in the case of breaking the rules. The main source of information (93%) is the documentation of LASER, where the application for the COP-premiums have to be made.

Illustration 5.1 Awareness of the regulations concerning environmental management of the set aside grounds

Knowledge	% of farmers
Good	66%
Fair	31%
None	3%

Of the farmers who knew the rules (good or fair), 89% declared that they also applied them. A problem mentioned was local use of herbicides (instead of at parcel level). One quarter of the farmers (28%) participated in some form of environmental protection program.

5.1 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

The effect is mostly neutral (48%). A positive effect (38%) if present can be attributed to soil improvement of wet parcels and the use of cover crops.

Although there is an extensive legislation on environment in the Netherlands, the relation with soil management with respect to set aside is considered marginal if present. the aspect of soil improvement of Nature Set Aside is dealt with under 4.4.3.

Details of the answer

Following the characterisation scheme of the farmers in the survey, nearly half of them showed no special negative or positive behaviour concerning the soil, see illustration 5.2.

Illustration 5.2 Effect of set aside on soil management in the Netherlands (estimated)

Type of effect	% of farmers classified
Negative impact	14%
Neutral impact	48%
Positive impact	38%

Out of the farmers participating in an environmental program, 38% did this with respect to soil improvement.

The supposed slightly positive effect on the structure of the soil and the agricultural value has been discussed in section 4.1.

There exists an extensive legislation on soil and water protection at national level in the Netherlands. This legislation is fully applicable to set aside land, for example, the Soil Protection Law, the Pesticide Law 1962 (Statute Book p288) and the Decree on use of Animal Manure (Statute-book 1991, p. 286). In the national implication of the set aside regulation, this legislation is explicitly mentioned. (examples are the obligation to have a crop-free and pesticide-free zone alongside water). According to our information (from national authorities) , set aside has not intensified the application of this already existing legislation.

5.2 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

Set aside has no particular effect on water management in the Netherlands.

Details of the answer

Set aside parcels are not irrigated (neither are other parcels). Use of herbicides and fertilisers alongside water is under regulation anyway, so the effect of set aside is rather neutral. Some farmers mentioned that good maintenance of set aside land needs the use of herbicides, not only locally (spot-wise). One farmer expected that reduction of wheat could increase the need to use pesticides because the natural plague-reducing effect of wheat would be lost.

A point brought up by several farmers is, that a more substantial and positive effect could be reached if it would be allowed to bring smaller strips of land alongside water under the set aside scheme, thus restricting cultivation of crops to the "interior" of the parcel.

In that case a zone would emerge, separating in a natural way cultivated land from water (many parcels are separated by water in the Netherlands). This would also have a positive effect on landscape and wildlife.

The aspect of national legislation has been dealt with under 4.4.1.

5.3 Question 4.4.3 Did the adoption of the set-aside have a significant impact on the improvement of the landscape management ?

Synthetic answer

Set aside in general has a noticeable and predominantly positive effect on the landscape in the Netherlands. This is mainly due to the use of flowering cover crops, as stated by 52% of the farmers.

National legislation, in particular Nature Set Aside, has contributed to this positive impact.

Details of the answer

Half of the farmers in the survey declared that their set aside parcels could be distinguished clearly from the surroundings, not only for experts but also for the general public. The main reason is the use of marked cover crops, notably *Raphanus sativus*, by which the set aside parcels highlight in the otherwise "monotonous" landscape by their flowering appearance.

This holds even stronger for parcels under the national regulation of "nature set aside", which are characterised by a mixture of flowers.

According to the characterisation scheme of the farmers surveyed, in 14% of the cases, the effect was negative. In those cases where bare fallow parcels were visible in the landscape, 7% of the farmers had received negative remarks about the abandoned state of these parcels.

As set aside is mostly rotational, there are no particular locations of set aside land. Hence, there is no tendency whatsoever of concentration of set aside land in certain areas. Set aside parcels are scattered randomly.

Nature Set Aside is a special regulation, financed by the national government and operational since 1998. It has been specially developed as a supplement to the (European) set aside regulation in order to stimulate nature-oriented management of set aside parcels (see A6.1.3 for a description of the measure). The measure aims at improvement or conservation of nature values, with a possible side effect on soil. Although not many farmers in the survey practise nature set aside, the measure was well known. It was mentioned that the intention to discontinue the measure, aroused protest from the agricultural sector and in parliament, upon which it remained in force.

5.4 Question 4.4.4 Did the adoption of the set-aside have a significant impact on the bio-diversity maintenance ?

Synthetic answer

The aspect of impact on bio-diversity is more or less ad hoc. Some farmers participate in protection programs (38% of the farmers in the survey who participated in any program); the relation with set aside is not straightforward, but can be present.

Also, the national regulation of Nature Set Aside has in individual cases favoured bio-diversity.

Details of the answer

Three aspects can be mentioned:

- In several cases, farmers participate in bird protection programs. The advantage of set aside land is, that less cultivation takes place, notably mowing. Therefore the parcels are attractive for birds;
- the use of flowering cover crops is appreciated by bee-keepers, especially since the cultivation of rape-seed has broken down. Farmers allow the bee-keepers to place their hives in or near set aside parcels; on the other hand, they select their (crops) on their own agricultural merits;

- in the case of nature set aside, a significant positive effect can be seen. Not only farmers in the traditional sense have set aside land, but also nature conservation organisations. One of the participants in the survey was such an atypical "farmer", a Provincial Countryside Protection Foundation. It had a considerable amount of set aside land, 40% of which was nature set aside. This had a very positive effect on local insect life, birds, etc. (which was of course one of their objectives).

In conclusion, it can be said that in some cases, there is a noticeable positive effect, although in general a positive effect will be present, but without any possibility of quantification. Nature Set Aside has been mentioned under 4.4.3.

6. Questions relating to the complexity of regulation and of its setting in place

6.1 Question 4.5.1 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?

A question for the national level (see Annex 6)

6.2 Question 4.5.2 What effects did national or regional application legislation have on the effectiveness of the set-aside instrument

As for the implementation of the regulation, the survey gives the following problems encountered by the farmers:

Illustration 6.1 Administrative problems experienced by farmers

Type of problem	% of farmers
Complicated administrative procedure	55%
Discussion about the area of the parcels	52%
Disbursement of grant too late	52%
Information about the set aside % came too late	31%
Lack of integration, in particular agri-environment measures	28%
Beginning and end dates of set aside was a problem	24%
Problems with the minimal size of the parcels	21%
Minimal yield of non-food caused problem	3%

These answers need some subtle interpretation.

With respect to the administrative procedure, many farmers declared that the burden was heavy in the beginning, but that the implementing organisation LASER has relieved this in the course of time by pre-filled forms and dedicated maps. Some experienced farmers consider it as routine. A general complaint is the lack of integration of the several administrative systems. Within a short time, farmers have to fill in forms for the CAP system, for the minerals registration (MINAS) and for the annual agricultural census. A number of the data asked overlap. Furthermore, the time of returning the form (15th of May) generally interferes with a busy period of work on the field.

Conclusion: the procedure is felt as complicated, but in our opinion the real burden of the set aside regulation alone is less than the 55% would suggest.

Many farmers had discussions about the exact area. The reasons vary from using different measure instruments (measure stick versus specialised surveying equipment) to a not up to date database of parcels. Parcel boundaries sometimes gave problems, as well as land consolidation programs. The real problem is not the possible difference, but the multiplying impact in the case when the set aside obligation is not met (and the fact that this becomes apparent only at the end of the season). Sanctions are being felt as very severe and disproportional. Several farmers wondered if this was a typical Dutch problem.

Payments of the set aside premium arrive at the end of the year, with a tendency to come later and later. In some cases a disbursement in the following year gives administrative complications with a calendar year accounting system. As a rule, however, it must be said, that the premiums were not paid beyond the date mentioned in the regulations. Of course, farmers like to receive them as early as possible.

As to information, it must be mentioned that some farmers make their cultivation scheme early, long before the next season¹³. As set aside is fully integrated in a rotation scheme in the Netherlands, the set aside rate is an essential parameter in the plan. Especially a change from 5% to 10% or *vice versa* has a large impact. Also, the recent change in the minimal 20m zone (which falls beyond the evaluation period) came (too) late for some farmers. A few farmers declared, that they received the information from their professional organisation earlier than through the documents.

Lack of integration of different lines of policy is felt by some 25% of the farmers as a problem. Use of herbicides, the distance to ditches and the impediment of an effective soil improvement were mentioned as complicating factors.

The beginning and end problems have already been mentioned for sprout farmers. Other problems are the impossibility to sow the next crop earlier than would be possible under the regulation and the fact that in a wet spring the rotation plan was not ready before 15th of May.

¹³ On the other hand, there are farmers for whom the date of 15th May is too early to have their cultivation scheme ready.

Not so many farmers have real difficulties with the minimum size of the parcels as such, in the sense that cannot satisfy the criterion. However, a general feeling is, that relieving the obligation of 0,3 ha minimum size and the 10m zone would allow more set aside along water and hence be beneficial for both agricultural practices and environment.

Other administrative problems are less frequent.

As for the (frequent) changes, farmers feel that they have to read the regulations every year again, since for them it is a unique event every year. They like to hear essential changes early (see above), but for the rest they seem to be more concerned with complying with the current rules than to bother about changes as they are accustomed to living in a world with changing rules.