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RESEARCH IN ECONOMICS AND RURAL SOCIOLOGY

Potential impacts of the CAP reform (2003) and its various options for application to suckler cattle farms

The last CAP reform is an extension of the 1992 reform, itself confirmed by Agenda 2000 in the decoupling of direct aid for production. In order to see adaptations of suckler-cow farms, simulations of various options for application of the reform were made for the main cases of farm businesses: more or less intensive breeders or breeders/fatteners of bull calves and steers, with varying quantities of crops, from the 3 areas of Charolais, Limousin and Pays de Loire. After adaptation at stable prices, globally maintained support and at constant surface areas, the trends that emerge show the weak impact on economic results, crop reduction to make way for meadows and cattle, an increase in the number of cows after a reduction in the reference situation, maintenance of female finishing with price ratios between categories in 1998, and male fattening which was more difficult but maintained in certain options in the producer-fattener systems studied.

Purpose of the research

The purpose of the work is to study the potential adaptations of several types of suckler-cow farms in terms of crop status, level of intensification of fodder areas, types of bovines produced and size and composition of herds according to fodder resources. The consequences of these adaptations on economic results according to the various options for implementation of the reform are simulated by a comparison between an initial situation (used to calibrate our models) and a situation of reference before the reform.

Tool and Methods

A model to optimize economic results with linear programming developed by the unit in collaboration with the INRA-INAPG unit is used to assess the impacts at suckler-cow farms. . It determines the optimal farming system, that is:

- Best allocation of the UAA (Unit of agricultural area) between non-fodder crops (cereals self-consumed or sold /oilseeds) and fodder (types of meadows/maize-fodder),
- Types of bovines produced (table 1),
- Size of herd and its composition (cows/young) adapted to fodder resources,

which maximize the global gross margin of the farm while respecting a large number of structural, agronomic, zootechnical and administrative constraints (for further details see Veysset *et al*., 2000).

CAP situations

For 8 farms representing quite varied cases (table 2) taken from our network of observations or from model cases described in the framework of cattle networks by the Institut de l’élevage (French breeding institute): **the following 6 CAP situations** are envisaged (table 3):

- **1998 starting situation**: this is a known and “normal” situation both at CAP level (1992 reform up and running) and in terms of cattle prices after the first BSE crisis in 1996.
- **2003 reference situation**: the Agenda 2000 reform is being enforced. The new agri-environmental grass premium replaces the premium for maintaining extensive livestock-farming systems.

Cattle prices (table 1) are 1998 prices uniformly reduced by 20% as outlined in Agenda 2000: they are different from those actually observed in 2002. They may be considered as non-stabilized after the 2001 BSE crisis. Cereal prices fall by 15% as outlined in Agenda 2000. Other prices (oilseeds, unit cost of variable expenses) do not vary. Prices of energy concentrates and cereals bought drop by 10%.

- **Total decoupling**: the optimisation is done without any CAP premiums. Their amount is fixed to that of the 2003 reference situation and added to the economic results after optimization.

  Product prices remain the same as in the 2003 reference situation.

Partial decoupling: 25% of the amounts of workers' cooperative premiums remain coupled. For beef-cattle, 3 options remain possible:

- **SCP** option (Suckler cow premium): 100% recoupling of the CP and 40% of the slaughter premium of fat cattle, keeping the same rules for the SCP premium granted within individual references, with the opportunity to integrate up to 40% heifers.

- **SPMA** option (Special Premium for Male Animals): recoupling of 75% of the SPMA

- **Slaughter premium** option: recoupling of 100% of fat cattle.

The decoupled part is treated in the same way as in total decoupling.

In the various decoupling options, prices of the unitary sales of cattle and crops do not vary compared with the 2003 reference situation, like the price of structure expenses. Only the farmer's social costs vary with the farm's profit and loss.

The national part of the SCP has not been isolated; therefore, it is also decoupled, except in the SCP option where it remains completely coupled.

The set-aside area of the reference situation is necessarily preserved in at least 4 decoupling options, without a premium in the situation of total decoupling and with 25% of SCOP premiums in the other 3 options.

The 5% compulsory modulation applied from 2007 to the amount of support exceeding 5,000 € was not taken into account because this transfer from the first pillar to the second will be redistributed under forms to be determined.

The results

Case 1: little intensive Charolais calves with crops

At first, this farm of 61 cows (table 4) produces lean cattle, slightly fattened grass calves to be subsidized, grass calves sold at weaning; only a few cull cows are fattened. Cereals and oilseeds are grown with fallow on 35% of its UAA. With the **Agenda 2000** opportunity to incorporate up to 40% of heifers into the SCP, farms are allowed to be given 60.8 references with only 36 suckling cows, which leaves the opportunity for the production cycle of calves to be extended. This is also encouraged by the SPB implementation which was completed by the allocation of the flexibility fund for fattened females and especially for heifers. There is a major reduction in cows (-40%) and lesser in herd size (-17%) because of the growth in the number of young to be fattened. This clears areas for non-fodder crops which go from 35 to 51% of the UAA, as well as a slight intensification up to the threshold of 1.4 administrative of livestock unit (LU) / ha of main fodder unit (FU) in order to obtain the maximum extensive supplement.

In the situation of **total decoupling**, the equilibrium is modified, crops become less interesting without the premium; and therefore decrease by returning to a position close to the initial situation with fewer oilseeds. The number of cows rises again while remaining lower than the initial situation, note that females fattening (cull cows and especially heifers) continues; these activities are more influenced by price ratios than by premiums. In the 98 initial situation, the margin obtained by fattening is, by LU, lower than that for breeding cows, hence the sales of heifers as store animals as well as a part of cull cows lean in order to keep the maximum of cows (61 for a benefit of 60.8 SCP). On the other hand, without the SP incentive, males are no longer fattened but sold lean at 16 months, a quite economical system.

In this situation of total decoupling, Family Farm Income (FFI) is maximum, 2 K€ (10%) higher than the reference situation; indeed, in this case premiums are assured (45.6 K€) without any constraint (stocking density for the extensive supplement, under the obligation of having animals except for the SCP).

Table 1: Characteristics of various categories of beef meat

		Charolais		Limousin	
Source	Network	INRA-LEE 97-99		Technical support	
Categories of animals		**Weight**	**98 Prices (€/head)**		**98 Prices €/head**
Lean males				Alive	
Store calves 8 months No premium	Br8	300	777	300	819
Store calves 10 months premium	Br10	360	823	340	854
Store Calves 13 months premium	Br31	450	892	400	915
Young bulls 16 months	TM16	470	988		
Finished Males		Net		Net	
Young bulls Auge 17 months	TG17	400	1,189	380	1,188
Grass young bulls 23 months	TG23	440	1,278		
Steers 28 months	*B28*	*440*	*1,476*	*420*	*1,476*
Steers 31 months	*B31*	*460*	*1,543*	*440*	*1,543*
Steers 36 months	*B36*	*465*	*1,560*	*445*	*1,560*
Lean heifers		Alive		Alive	
Autumn store 8 months	Br8	270	547	270	625
Winter store 13 months	Br13	345	620	345	789
Heifers 16 months	M16	410	755		
Heifers 24 months	M24	460	843		
Heifers 31 months	M31	580	1,119		
Finished heifers		Net		Net	
Heifers 15	G15			275	1,085
Heifers 27	G27	346		350	1,254
Heifers 31	G31	380	1,274	365	1,281
Heifers 36	G36	385	1,291	380	1,332

In grey: categories not permitted; in italics: special categories only permitted in some cases

In the situation of partial decoupling with the **SCP** option, the system resulting from the optimization is close to total decoupling with more crops and fewer cows. SCP 100% re-coupling with the same rules does not change the system, what is normal because, by keeping 46 cows as in previous situation, this farm obtains its maximum that is to say 60.8 SCP. The 40% of re-coupled SCP is not enough to cause male finishing. The amount of CAP premiums obtained is lower than the 1.4 K€ situation of reference; the "coupled" part, save SCP, does not get to the reference situation level, there is no more than 22 SP against 35 and 43.9 ha of SCOP against 56.3. All the same, the FFI remains upper than the reference situation (+5%) while not reaching the FFI of total decoupling (-5 %).

The SPMA option is also similar to both previous situations, as lean bull-calves benefit from SPMA. We might have thought that a production of 10-month grass-fed calves with premiums would maximize the SPMA for their time of presence (LU), but the economical aspect of 16-month bull-calves using more grass prevailed. The total amount of premiums is slightly higher (+0.9K€) than in the SCP option, since the decoupled part is bigger.

Table 3: Beef premiums according to CAP categories

CAP categories	from 1998	reference 2003	total	SCP	SPMA	SP
SCP European share/t	147.83	200	0	200	0	0
National share for first 40 cows	30.59	50	0	50	0	0
Other cows	6.12	25.85	0	25.85	0	0
Min % of heifers to incorporate into SCP	0	15		15		
Max % of heifers to incorporate into SCP	0	40		40		
SPMA Young bulls	137.64	210	0	0	157.5	0
Castrated males (perceived twice)	111.13	150	0	0	112.5	0
National stabiliser SPMA	98.5	94.8			94.8	
Slaughter premium Fat cattle	0	80	0	32	0	80
Additional premium slaughtered females	0	18.29	0	0	0	0

Additional slaughtered heifers Extensive additional premiums level 1	0	61.5	0	0	0	0
level 2	53.02	80	0	0	0	0
Max Administrative stocking for level 1		1.8				
level 2		1.4				
Max density premiums for level 1	1.4					
level 2	1					
Ceiling density of premiums for SCP and SPMA	2	1.8		1.8	1.8	
Grass premium (Grass premium for maintaining Extensive livestock-farming systems or Agri-environmental grass premium) /ha	45.73	76	76	76	76	76

Last, the SP option is more different from the other 2, with the 100% re-coupling of the SP restoring some interest in the production of fat bull-calves. The number of cows decreases and proportion of crops increases to 43%; the system chosen in this situation is more intensive (a 1.31 stocking density against 1.19 in the previous situations), hence the use of less fodder area. The amount of premiums obtained is higher than other options and close to total decoupling; On the other hand, FFI is slightly lower than the other options and identical to the SCP option.

Economic results are globally little different according to the 4 options envisaged with the adaptations made, only 5% between the lowest (SP and SCP) and the highest (total decoupling).

The decoupling in the SCP option (ratio of total decoupled aid /total aid of 57% against 86% in SPMA and 85% in SP) is only much lower in appearance. Due to its upper limit with the opportunity to incorporate heifers into the statement of female livestock, SCP in itself is less coupled than the other 2. If we add a cow, the amount of premiums only increases by 15€ in the SCP situation (no SCP since it is at its upper limit (individual)) while it increases by 68€ and 77€ in the SPMA and SP options due to consecutive increases in male livestock, the premiums of which only have an upper limit at national level.

In this case, the 5% compulsory modulation represents approximately 2,000€ slightly lower than other options and identical to the SCP option.

Case 2: very intensive cow-calf producers and fatteners-finishers of Charolais in the French Pays-de-Loire

This very intensive farm-business (2.5 LU/ha) (table 5) at first fattens all its products with cropped maize (5.2 ha) and cereals (10.3 ha). This orientation is not questioned by Agenda 2000, as the new allocation threshold of the extensive supplement is, in spite of its revalued amount, much too high (1.8 of the stocking density for 40€ of SCP and SPMA supplement, while the farm business is at 3.2). The farm business is affected by the ceiling density in SCP and SPMA at 1.8 but that does not involve a decrease in livestock, only a limitation on premiums.

The total decoupling removes the finishing of males which are sold as store calves at weaning, allowing the development of cow livestock (+10) and a reduction in the cereal area which is based as in the previous 2 situations on the herd's needs. The 3 partial decoupling options here are close to the reference situation, with major fattening (2/3 of the males) in the SCP and SPMA options. The SP option is almost identical to the reference situation. In this very intensive and successful system, total decoupling involves a slight deintensification of 2.55 LU/ha at 2.30 in total decoupling. In the reference situation, various premiums per head involve a certain intensification, which is barely limited by the SCP and SP density ceiling that is exceeded here.

Case 3: little intensive Charolais Producer

This case differs from case 1 by the more restricted opportunity to have crops, the natural minimum constraint of 50 ha of PG (permanent grassland) being restrictive in all situations. However, this case is quite common in the Charolais area. As in case 1, the farm-business produces lean cattle and only cull cows are fattened. Heifers are finished in all situations except in the initial one where cows are given priority in order to collect the 49 SCP. In the reference situation, males are finished as bull-calves, but not in the various decoupling options, with the exception of the SP option in which one third of the males would be finished.

Case 4: intensive Charolais Producer-fattener

As in case 2, we have a quite intensive farm for the area (1.84 UGB/ha) fattening all its production with 17% of crops. This system is consolidated in the reference situation, but with a 1.65 reduction in livestock to obtain the 1st level of extensive supplement (40€) for its SCP and SPMA. Male fattening is not maintained in the situation of total decoupling or in the SPMAS option; on the other hand, we find it in the SCP option and all the more so in SP. Total decoupling, even without the attraction of the extensive supplement, is the least intensive situation in relation to the surface areas, and animal premiums attributed to head of cattle have a certain intensifying effect except for the SCP which is limited to rights.

Case 5: little intensive Limousin Producer

We note the same effects as in Charolais cases 1 and 3. From a lean system, heifers are fattened in all the situations at 27 months, 2/3 of the males are fattened only in the reference situation; on the other hand, in the SP option, we have autumnal 8-month grass-fed calves because, compared with fat bull-calves, their price is more favourable than in the Charolais region. A proportion of male finishing (10/23) is nevertheless kept in the SPMA option.

Here we can see the effect of the withdrawal of the extensive supplement; livestock goes from 1.28 to 1.44, while keeping the grass premium thanks to the possibility of integrating the auto-consumed cereals not subsidized in fodder areas.

Case 6: extensive Limousin Producer with oxen without crops

This large farm located in a difficult environment (Plateau de Millevaches), livestock around 1 UGB/ha without crops, fattens 30% of males as 30-month grass-oxen as well as its heifers and cull cows. This system is not modified in the reference situation; on the other hand, in decoupling, oxen are given up for additional cows, even in the SPMA option which is, a priori, more favourable to them, because it retains the benefit of 2 SPMA (at 75%) but without SP.

Case 7: intensive Pays-de-Loire Producer

The same effects as in cases 1, 3 and 5 can be noted.

The producer system becomes a fattener one in the reference situation, heifer fattening continues in decoupling, male fattening totally disappears in total decoupling. It is reintroduced very slightly in the SPMA option (2/26), which means that a slight increase in the price of bull-calves compared with grass-fed calves would bring them back. In the SCP and SP options about half of the males are fattened. Livestock increases in the reference situation. As it is too difficult to obtain the maximum extensive supplement (80€), the system settles at 1.8 administrative UGB/ha which gives the reduced amount (40€). The decoupling adjusting the livestock to the meadow potential maintains the livestock level of the reference situation.

Case 8: Charolais Naisseur with little intensive oxen fattening, without crops

As in case 6, the absence of crops limits adjustment potentialities; on the other hand, the fattening of 10 out of 27 males born is found in all the partial decoupling options. Heifer fattening disappears in the SPMA option.

Summary (table 6)

In each situation, the results of the optimal system maximizing global margin were presented. There are different, slightly suboptimal systems for only a few hundred euros less. The model is also very sensitive to price changes between categories of cattle produced. In spite of these reserves, a few trends clearly emerge.

The variations in **economic results** are very low after adaptations between the various options of decoupling and are a little higher than the reference situation.

There is a trend towards **crop reduction** in cases where the opportunity existed. In the past, fodder area margin was usually higher than crop margin; it did not prevent a reduction in meadows in the intermediate areas, with SCOP premiums emphasising this trend.

The level of **intensification changes little**; remember that we compare optimized systems with each other, with livestock already being adjusted to environment potential, and that we did not simulate any extension in surface area. The withdrawal of the extensive supplement which could restrict some systems can give way to a slight intensification, except when the grass premium involves more or less the same constraints.

The **number of cows** increases in comparison with the “2003” reference situation where this number had decreased. This “2003” situation resulting from the simulation is certainly theoretical but after 30 years of increase, the quite new trend towards a reduction in suckling cows is reported in the last national statistics following the implementation of Agenda 2000.

Female finishing is maintained overall by taking 98 price ratios; on the other hand, it would not be so with the price ratios noted in 2002 but decoupling does not intervene (in the reference situation, heifers are also sold lean); we can consider that the restoring of these price ratios begun in 2003 will continue.

Male finishing raises more problems, the Italians, our main customers for grass-fed calves, will very likely choose the SP option; part of this re-coupled support may be included in the price of lean cows that they will continue buying (no other alternatives, the animals supplied are of excellent health and genetic quality).

Once their needs saturated, a part will remain to be finished in France. The SP option is obviously more favourable to the finishing of bull-calves without guaranteeing this in every case; the small re-coupled part of SP (40% or 32€/t) in the SCP option may be sufficient in some well-placed cases. We would have the same results in the 2002 situation because the price ratio between fat bull-calves and grass-fed calves did not change between 1998 and 2002. If the country fattened a larger proportion of bull-calves, this would raise the problem of their outlet in France (or anywhere else?); these bull-calves could, as was the case at the end of 2001-2002, take the place of cull cows which we would not know what to do with!

Conclusion

The right to single payment (RSP) implemented by the reform including the decoupled part of aid is amounts that difer greatly according to the system and history of the farm. For example, with the SCP option in a group of Charolais breeders monitored by our unit, some high variations in the RSP appear between 50 and 250€/ha. How can transfers be carried out? Might this "rights-to-payment" market lead to a double overbid on land and "rights", and how will it be regulated?

The **regionalization** potentiality of these RSP (single amount per region) could be a solution, at what scale? Administrative regions (production areas do not often correspond to this division), departments (major entity), small (difficult) agricultural area or whole country (why not if permitted?)? According to the French Institut de l'Elevage (French breeding institute), the average amount would range from 100€/ha in Limousin, 300€/ha in Brittany and Alsace in SCP option and 260 in Auvergne up to 420 in Alsace in total decoupling. Another question: can we regionalize by doing partial decoupling? This would introduce even bigger distortions because by equalizing the only decoupled part, the coupled part remains highly variable according to the system (with the extremes of 0% in milk, 100% in SCP.

At all events, the main unknown factor remains the **prices** resulting from these modifications and from interactions between productions (milk-meat) which will play the main role, as they always have; the premium system which can only slow down or accelerate the trend, with working and living conditions having more and more influence. For example, maize fodder developed greatly between 1970 and 1990 without support and decreased by 6% between 1988 and 2000 in spite of extensive support. Some of the CAP measures may allow some developments to be controlled, as it is the case for the dairy quotas, SCP references (and ewe premiums) which are tied to the soil and have avoided the concentration and relocation that porcine and poultry productions experienced.

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For further information

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Table 2: Representative farm characteristics, invariant according to CAP profile

Case #	1	2	3	4	5	6	7	8
Areas	**Charolais**	**Pays de Loire**	**Charolais**	**Charolais**	**Limousin**	**Limousin**	**Pays de Loire**	**Charolais**
Starting system	Little intensive Producer with crops	Very intensive cow-calf producers fatteners-finishers	Little intensive producers	Intensive Producers-fatteners	Little intensive producer	Extensive oxen producer without crop	Intensive producer	Little intensive oxen producer without crop
UAA (ha)	110	53	70	90	70	141.6	70	87.5
PG min (ha)	36.5	5	50	35	20	72.6	9	44
No of SCP references	60.8	58	49.4	50.4	57.7	76	68	53.5
Cereal yields (cwt/ha)	50	70	55	60	30		65	
Rapeseed	25			30				
Sunflower	18			20				
Cereal costs (€/ha)	239	371	247	329	232		384	
Cow productivity								
Weaned calves/calving	93.7	96	92.3	94.34	90	90	94.28	96.4
Cull rate	23.4	28.3	23	24.53	20	34	28.57	27
Support LFA K€/farm	1.8	0	1.8	1.8	6.6	6.6	0	6.8
Grass Premium	No	No	Yes	No	Yes	Yes	No	Yes
% max of oxen	0	0	0	0	0	30	0	37.5
98 price of lean cows €/head	930		990	945				826
Fattened cows €/head	1159	1350	1174	1174	1238	1457	1314	1165
Maize fodder yield (t DM/ha)	8	10	9	10.5			10.5	
Cost of maize fodder (€/ha)	326	220	326	326			280	

Table 6: Summary of the results obtained from the 8 case-studies

#	Case CAP situation	Departure Opt 98	Baseline 2003	Total decoupling	Partial decoupling 26 June			Decoupling			
					SCP	SPMA	SP	Total	SCP	SPMA	SP
	Number of cows							Compared to the baseline			
1	Breeder little intensive with crops Charolais	61	37	48	46	48	42	++	++	++	++
2	Breeder-fattener very intensive PaysdeLoire	58	57	68	60	59	57	++	+	+	=
3	Breeder little intensive Charolais	49	36	42	42	42	42	++	++	++	++
4	Breeder fattener intensive Charolais	73	64	66	70	68	70	+	+	+	+
5	Breeder little intensive Limousin	58	42	57	56	51	56	++	++	++	++
6	Breeder with oxen extensive Limousin	82	78	87	87	86	87	+	+	+	+
7	Breeder intensive PaysdeLoire	68	48	58	53	56	52	++	+	++	+
8	Breeder with oxen little intensive Charolais	56	50	56	53	56	53	++	+	++	+
	Destination of males										
1	Breeder little intensive with crops Charolais	Br10	TG17	TM16	TM16	TM16	TG17	M	M	M	TG
2	Breeder-fattener very intensive PaysdeLoire	TG17	TG17	Br8	2/3TG+1/3Br8	2/3TG+1/3Br10	TG17	M	TG	TG	TG
3	Breeder little intensive Charolais	TM16	TG17	TM16	3/4TM16+1/4Br8	TM16	2/3Br8+1/3TG	M	M	M	M
4	Breeder fattener intensive Charolais	TG17	TG17	TM16	TG17	TM16	TG17	M	TG	M	TG
5	Breeder little intensive Limousin	Br10	2/3TG17+Br	Br8	Br8	60%Br+40%TG	Br8	M	M	M	M
6	Breeder with oxen extensive Limousin	30%B31+Br	30%B31+Br	Br8	Br8	Br10	Br8	M	M	M	M
7	Breeder intensive PaysdeLoire	Br10	TG17	Br8	1/2TG+1/2Br	Br10	1/2TG+1/2Br	M	M/G	M	M/G
8	Breeder with oxen little intensive Charolais	37%B31+TM	37%B31+TM	22%B31+Br8	37%B31+Br8	37%B31+TM	37%B31+Br8	Oxen	Oxen -	Oxen	Oxen
	Stocking density										
1	Breeder little intensive with crops Charolais	1.16	1.28	1.19	1.24	1.19	1.31	-	=	-	=
2	Breeder-fattener very intensive PaysdeLoire	2.55	2.55	2.3	2.44	2.45	2.53	-	=	=	=
3	Breeder little intensive Charolais	1.22	1.18	1.22	1.23	1.22	1.25	=	=	=	+
4	Breeder fattener intensive Charolais	1.65	1.56	1.75	1.56	1.75	-	+	-	+	
5	Breeder little intensive Limousin	1.28	1.28	1.44	1.40	1.49	1.40	++	+	++	+
6	Breeder with oxen extensive Limousin	1.02	0.97	0.96	0.96	0.97	0.96	=	=	=	=
7	Breeder intensive PaysdeLoire	1.51	1.65	1.66	1.70	1.66	1.70	=	=	=	=
8	Breeder with oxen little intensive Charolais	1.14	1.13	1.14	1.14	1.14	1.14	=	=	=	=
	% non fodder crop										
1	Breeder little intensive with crops Charolais	35	51	32	37	32	43	--	--	--	--
2	Breeder-fattener very intensive PaysdeLoire	19	20	11	17	17	20	--	--	--	=
3	Breeder little intensive Charolais	15	18	15	16	15	18	--	--	--	=
4	Breeder fattener intensive Charolais	17	19	17	17	16	17	--	--	--	--
5	Breeder little intensive Limousin	13	20	15	15	20	15	--	--	=	--
6	Breeder with oxen extensive Limousin	0	0	0	0	0	0				
7	Breeder intensive PaysdeLoire	8	22	20	23	20	23	-	+	-	+
8	Breeder with oxen little intensive Charolais	0	0	0	0	0	0				
	Current result (K€)										
1	Breeder little intensive with crops Charolais	18.6	19.4	21.4	20.6	21.2	20.5	10	6	9	6
2	Breeder-fattener very intensive PaysdeLoire	18.8	17.3	17.8	17.4	17.5	17.4	3	1	1	1
3	Breeder little intensive Charolais	18.6	21.1	23.2	22.3	22.9	21.9	10	6	9	4
4	Breeder fattener intensive Charolais	18.8	19.8	19.8	20.0	19.9	5	5	6	6	
5	Breeder little intensive Limousin	22.5	25.8	30.0	29.3	28.5	29.1	16	14	10	13
6	Breeder with oxen extensive Limousin	31.7	34.0	35.2	35.1	34.0	34.8	4	3	0	2
7	Breeder intensive PaysdeLoire	20.5	21.1	22.6	22.4	22.7	22.2	7	6	8	5
8	Breeder with oxen little intensive Charolais	25.3	27.5	28.4	28.4	27.8	28.4	3	3	1	3

Table 4: Case #1

Charolais little intensive with crops	Starting point 1998	Baseline 2003	Total Decoupling	Partial decoupling 26 June SCP	SPMA	SP
Non fodder crops % UAA	35	51	32	37	32	43
Number of cows	61	36	48	46	48	42
Number of bovine LU	83	69	84	82	84	79
Males (see table 1)	29 Br10	17 TG17	22 TM16	22 TM16	22 TM16	20 TG17
Heifers	14 Br8	9G31	11 G31	11G31	11 G31	10 G31
Cull cows	5M+9 G	9 G	11 G	11 G	11 G	10 G
Cereals (ha)	25	36	25	27	24	31
auto-consumed	4	10	6	6	6	11
Gross Margin (€/ha)	544	490	176	255	255	255
Coupled support €/ha	295	314	0	79	79	79
Oilseeds (ha)	12	14	9	11	9	13
Gross margin (€/ha)	669	499	185	263	263	263
Set-aside (ha)	2,3	5.6	5.6	5.6	5.6	5.6
Maize fodder (ha)	6.8	0.0	0.0	0.7	0.7	0.6
Permanent grass area (ha)	64.3	53.6	70.9	65.3	70.1	59.3
Margin Bov (€/LU bov)	549	648	271	452	310	283
SCP €/LU	125	213	0	180	0	0
Other coupled support Bov/LU	86	191	0	8	0	40
Stocking density	1.16	1.28	1.19	1.24	1.19	1.31
Administrative stocking	1.47	1.40	1.37	1.44	1.39	1.45
Margin SFP € / ha SFP (coupled)	666	832	322	561	370	372
CAP support (K€) coupled	33.4	45.6	0.0	18.9	6.5	7.1
CAP support (K€) decoupled	0.0	0.0	45.6	25.3	38.6	38.4
Total CAP support	33.4	45.6	45.6	44.2	45.1	45.5
Current result (K€)	18.6	19.5	21.4	20.4	21.1	20.4

Table 5: Case #2

Pays de Loire breeder fattener very intensive	Starting point 1998	Baseline 2003	Total Decoupling	Partial decoupling 26 June SCP	SPMA	SP
Non fodder crops % UAA	19	20	11	17	17	20
Number of cows	58	57	67	60	59	57
Number of bovine LU	109	107	109	107	107	108
Males (see table 1)	26 TG17 + 2 Br	27 TG17	32 Br8	18TG + 10Br8	19TG + 10Br	27 TG17
Heifers	11 G31	11 G31	13 G31	12 G31	12 G31	11 G31
Cull cows	16 G	16 G	19 G	19 G	17 G	16 G
Cereals (ha)	10	11	6	9	9	10
Gross Margin (€/ha)	581	506	191	270	270	270
Coupled support €/ha	291	314	0	79	79	79
Maize fodder (ha)	5.2	5.4	2.9	4.6	4.6	5.2
Permanent grass area (ha)	37.5	36.8	44.4	39.2	39.1	37.4
Margin Bov (€/LU bov)	462	448	235	375	260	262
SCP €/LU	91	131	0	132	0	0
Other coupled support Bov/LU	35	97	0	14	33	40
Stocking density	2.55	2.55	2.30	2.44	2.45	2.53
Administrative stocking	3.18	3.19	2.82	3.03	3.04	3.15
Margin SFP € / ha SFP (coupled)	1213	1180	540	923	644	671
CAP support (K€) coupled	18.2	29.5	0.0	16.7	4.6	5.6
CAP support (K€) decoupled	0.0	0.0	29.5	12.5	24.9	23.9
Total CAP support	18.2	29.5	29.5	29.1	29.5	29.5
Current result (K€)	18.8	17.3	17.8	17.4	17.5	17.4