

## **Direct marketing of beef in organic suckler cattle farms: economic results and impact on breeding system management**

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### **Abstract**

*In response to the bovine crises of 1996 and 2000, and also to the poorly structured organic beef market chain, direct marketing of beef to consumers by the farmer has developed. We studied the impact of this marketing system on economic performance and farming practices. The results show that direct marketing can generate added value, despite the extra costs. Farmers have made the necessary changes to their practices, and have adapted their herd management. Through strengthening the link between the farm and the outside world, direct marketing offers an alternative to the expansion of farms, making it possible to support a greater workforce with the same structure.*

### **Introduction**

In the last ten years several crises have occurred in the beef market chain (BSE). These crises caused a temporary drop in French consumers' confidence and a collapse of meat prices paid to the producers (Veysset et al., 2002).

To try and control the risk of price fluctuations, and also to make better use of extensive animal production from grasslands, which enjoyed a good image, some farmers chose direct marketing of meat (Lozier et al., 2005). Direct marketing (DM) of beef is still marginal in France, concerning only 0.8% of the national market. Beef from organic farming (OF) -certified farms represents only 1% of the domestic market, while only 1.6% of suckler cows are OF-certified. More than half the animals produced from OF suckler cattle are not sold on the organic market, owing in part to the poorly structured OF beef marketing chain (Veysset et al., 2006). OF beef producers turned massively to direct marketing to find an outlet for their production with a remunerative price. Direct marketing now represents 22% of the organic beef market (Agence Bio, 2007).

The objective of this study was to assess the impact of direct marketing on economic results and farming practices for both OF and conventional suckler cattle farms.

### **Materials and methods**

Direct marketing is taken here to mean the sale to consumers of meat from farm animals.

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Surveys were carried out in 20 private suckler cattle farms in central France. These farms were specialised in beef production, with cow-calf and finishing systems (Limon, 2006). The sample covered the full diversity of the systems: (i) organic and conventional (Conv.) production systems, (ii) range of animals sold (calves, steers, bulls, heifers, cows) and (iii) butchery management either internalised (carried out on-farm in a specific building) or externalised (carried out off-farm by a service provider).

Interviews were used to determine the type, number and weight of the animals sold on-farm. The selling price to customers and all the costs and investments directly related to the DM were identified. The husbandry pattern and the management of the animals to be sold on-farm were described by identifying, jointly with the farmer, the changes made by category of practices (feeding, reproduction, replacement, range of animals, calendar sales). We used multivariate analysis to assess the consistency of the change processes.

Lastly we collected data on the organization of this activity and the estimated labour time requirements from slaughter to market.

## Results

### a) Sample and range of animals sold

Twenty cattle farms were surveyed, comprising 8 farms with OF and 12 farms with Conv. system. Table 1 shows the main structural characteristics of the farms, and the range and number of animals sold on-farm.

OF farmers sold more young animals by DM; 44% of the animals sold on-farm were calves (25% for Conv.). For adult sales, OF sold as many males as females, while Conv. sold predominantly females on-farm. The males from the French suckler herd were mainly sold as stock animals for the Italian market. There is no organic market for this type of animal; the organic farmers have to fatten their males if they want to sell them on the organic meat market.

**Table 1: Size of farms, and range and number of animals sold by direct marketing**

	Area (ha)	Calving s (nb.)	Animals DM (nb.)	Animals DM (%)	Animals sold DM (number/year)					kg carcass DM
					Cows	Heifers	Steers	Bulls	Calves	
OF	99	39	16	44	3	2	4	0	7	4 491
Conv.	150	94	24	25	6	9	2	2	5	7 686

### b) Economic results

The average selling price charged by the farmers was 9.8 €/kg for meat from adults and 12.9 €/kg for veal. These prices were close to those charged by the supermarkets for beef (9.9 €/kg) and below those charged by butchers (14.1 €/kg). The OF label permitted an added value on the retail sale price of about 20% for adults and 7% for calves, although according to the farmers, the customers valued the direct link with the farmer more than the OF label.

The selling prices of the animals per kilo of carcass, were 7.3 € and 9.2 € respectively for OF adults and calves (6.1 and 8.3 €/kg for Conv.).

The average specific costs linked to the DM amounted to 1.92 €/kg carcass distributed over three major items: (i) transport of animals and meat: 0.23 €/kg carcass, (ii) slaughtering, butchering, processing, depreciation of butchery unit: 1.56 €/kg carcass, (iii) water, electricity, administrative management, advertising: 0.13 €/kg carcass. We did not differentiate between OF and Conv., because these costs were not linked to the production system but mainly to the butchery management. However, we note that the transport costs were 0.14 €/kg carcass higher for OF owing to a shortage of OF-certified slaughterhouses, resulting in longer transport distances.

The threshold for the minimum volume of meat enabling the farmers to invest in specific butchery equipment was 8 tons of carcass per year, equivalent to 20 adult animals (400 kg carcasses).

Table 2 shows the net prices (€/kg carcass), which are the differences between selling prices and direct costs. Overall, in DM, OF adult animals earned an added value of 18% compared with Conv. We did not observe this added value for OF calves, because conventional calves have high value in DM.

Comparison with the classic marketing chain was made on the basis of the 2005 conventional market prices. The OF market being poorly structured, we could not indicate average OF prices. DM generated an average added value of almost 50% for OF and of 30% for Conv. This added value was higher for the adult animals.

**Table 2: Net prices (€/kg carcass) calculated for DM and observed in conventional classic market chain (CMC)**

Category	OF DM	Conv. DM	CMC	OF DM /CMC (%)	Conv. DM /CMC (%)	
Adults	Cows	5.3	4.6	3.22	+65	+43
	Heifers	5.1	4.4	3.59	+42	+23
	Steers	5.3	4.3	3.43	+55	+25
Calves	Milk	7.0	10.2	7.36	-5	+39
	Older	6.3	6.4	5.6	+13	+16

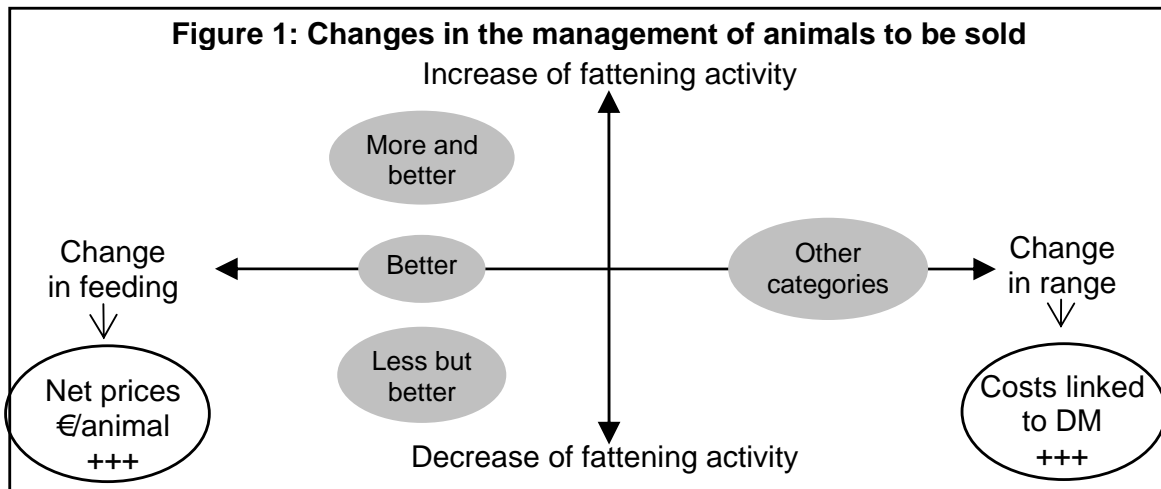
For the whole herd, taking into account the percentage of animals sold by DM, the gain was 136 €/LU/year for OF (50 €/LU/ year for Conv.). The average labour time spent in DM was 29 days per year, for a total added value of 6,900 €, or 350 € per day to finance the additional workforce requirements (240 €/day for Conv.).

### c) Farming practices

Concerning the management of the cattle, the main systematic change was an increased replacement rate (inducing a younger average age of cows in the herd) and an increased number of calving periods to produce young calves throughout the year.

The changes in farming practices associated with the animals to be sold concerned: the animal range, the ways of combining the oldest and the youngest animals throughout the year to ensure regularity of sales and the fattening schedule over the year. Two strategies were identified (figure 1). One was focused on the quality of feeding without changing the type of animals (a more "technical" strategy). The other was focused on animal categories, without changing the feeding management (a more "commercial" strategy). The link between these strategies and the economic results of the farms showed: (i) a sophisticated feeding and fattening management system with limited investments, to optimize the technical performance and the economic value of

each carcass (ii) a wide range of animals sold and a specific organization requiring investments both in time and money, with a strong involvement in the marketing activity, and with a broad offer to satisfy the consumers.



## Discussion, conclusion

Direct sales make it possible to add value to animals when there is a market opportunity. It is also a good way to sell animals that are not "standard" (e.g., steers and heavy calves) and at the same time satisfy the customer.

Only some of the animals produced by the farm are intended for direct sales. Hence at least two marketing circuits exist side by side. This creates a need to sort the animals. There are various strategies for directing animals according to the category to which they belong and their quality.

Direct selling adds value in spite of extra costs. The farmer's degree of commitment to direct selling cannot be assessed solely in terms of the quantity sold, because the farmer also makes choices in terms of investment and additional working time.

The practice of on-farm marketing is an alternative to enlarging structures because it makes it possible to create more added value and to provide a living for more workers from the same structure.

The development of this marketing method always brings about changes in herd management. How the farmers react is also important, because they adapt quickly and direct sales strengthen the farm's links with the outside world.

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