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International competitiveness of organic beef production in Germany

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Summary

The main objective of the project presented in this article was to analyse the strengths and weaknesses of German organic beef production as compared with France, Austria, the Czech Republic and Argentina. Additionally, a number of marketing initiatives in France, Austria, Great Britain and Switzerland were analysed to examine their applicability to German conditions.

Within the framework of the International Farm Comparison Network, eleven typical organic beef farms were analysed. Germany and Austria produce at the highest cost, and profitability in Germany is relatively low despite high levels of direct payments. Competitive pressure from France and Austria can not be expected as long as product price levels are higher than in Germany, and German export opportunities appear limited due to the French and Austrian preference for beef of national/regional origin.

There appears to be an incentive for conversion to organic farming on marginal grassland locations in the Czech Republic. However, future cost increases can be expected. Price differences between domestic and potential export markets will determine the extent of expansion of organic beef production. Argentina, the lowest cost producer, shows major similarities between organic and conventional beef production. However, its potential for further expansion appears to be limited.

The analysis of marketing initiatives shows, however, that the most pressing need for action lies on the marketing side and among the actors themselves. Improved product quality, price premiums, differentiation of marketing channels, and improved communication (towards consumers and in the supply chain) are main issues. As the elbow room for price increases appears to be rather limited in the foreseeable future, cost reductions remain a strategy for the producers.

Keywords: organic beef production, competitiveness, production cost analysis, marketing initiatives

Zusammenfassung

Internationale Wettbewerbsfähigkeit der ökologischen Rindfleischproduktion in Deutschland

Hauptziel des Projektes war die Analyse der Stärken und Schwächen der ökologischen Rindfleischproduktion in Deutschland im Vergleich zu Frankreich, Österreich, der Tschechischen Republik und Argentinien. Darüber hinaus wurden Vermarktungsinitiativen in Frankreich, Österreich, Großbritannien und der Schweiz auf Erfolgsfaktoren untersucht, um damit Verbesserungsmöglichkeiten für die ökologische Rindfleischvermarktung in Deutschland zu entwickeln.

Im Rahmen des International Farm Comparison Network wurden Fallbeispiele von elf ökologisch wirtschaftenden Betrieben untersucht. Deutschland und Österreich weisen die höchsten Produktionskosten auf, und die Rentabilität in Deutschland ist trotz der hohen Direktzahlungen vergleichsweise gering. Aus Frankreich und Österreich ist kein Wettbewerbsdruck zu erwarten, solange die Produktpreisniveaus dort höher sind als in Deutschland. Andererseits sind die Exportchancen für Deutschland wegen der dortigen Präferenzen für nationale/regionale Ware gering.

In Tschechien mit wesentlich niedrigeren Produktionskosten als Deutschland dürften Betriebe auf marginalen Grünlandstandorten einen Anreiz zur Umstellung haben. Andererseits sind zukünftig Kostensteigerungen zu erwarten. Die Preisdifferenzen zwischen dem Inland und möglichen Exportmärkten werden für die Ausdehnung der ökologischen Produktion entscheidend sein. Argentinien hat die niedrigsten Kosten und große Ähnlichkeiten zwischen der ökologischen und der konventionellen Rindfleischproduktion. Die Möglichkeiten zur Ausweitung der Produktion erscheinen jedoch begrenzt.

Die Analyse der Vermarktungsinitiativen zeigt jedoch, dass der Handlungsbedarf hauptsächlich auf der Absatzseite und bei den Akteuren selber liegt. Verbesserte Produktqualität, Realisierung von Preisaufschlägen, Differenzierung der Absatzkanäle, und verbesserte Kommunikation (gegenüber den Verbrauchern und innerhalb der Wertschöpfungskette) sind Stichworte. Da der Spielraum für Preiserhöhungen auf absehbare Zeit begrenzt sein dürfte, bleibt den Erzeugern nur die Möglichkeit ihre Kosten zu senken.

Schlüsselwörter: Ökologische Rindfleischproduktion, Wettbewerbsfähigkeit, Produktionskostenanalyse, Vermarktungsinitiativen

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1 Introduction

This article presents a selection of results of the project "International competitiveness of organic beef production in Germany" (Internationale Wettbewerbsfähigkeit der ökologischen Rindfleischproduktion in Deutschland). The project was developed under the auspices of the Federal Organic Agriculture Program of the German Government (Bundesprogramm Ökologischer Landbau).

The main objective of the project was to analyse the strengths and weaknesses of organic beef production in Germany in an international context. For that purpose it was necessary to consider both the raw production at the farm level and the marketing channels for organic beef, which have proven to be of great importance for the sustainable success of the organic beef production.

The project focused mainly on the following questions:

- How do German producers fare in an international comparison?
- What are the strengths and weaknesses of organic beef production in Germany?
- How can the marketing of beef production in Germany be improved?

For the analysis of the international competitiveness of the raw production, the countries considered were:

- France, as the largest beef producer in the EU with experience in conventional premium beef marketing.
- Austria, with more than a 10 % share of organic production in total land and a close trade partner of Germany.
- Czech Republic, as representative of the new EU Member States, with good conditions for a low-input pasture based beef production.
- Argentina, low cost producing country with an already significant beef market share in Germany.

The countries included in the evaluation of the marketing initiatives were Austria, France, the United Kingdom and one case study in Switzerland. The Czech Republic and Argentina were not considered here due to the poor development of their organic beef markets. The United Kingdom was additionally analysed as a "young" organic market, where the development of the organic sector has been demand-driven in the past.

Chapter 2 gives a short description of methods and databases. Chapter 3 presents a brief summary of framework conditions of the organic farming sector. The most important results from the cost of production analysis are shown in Chapter 4. Chapter 5 is dedicated to the organisational structure of the supply chain and sales channels for organic beef in the different countries. A summary of the most important success factors for organic beef marketing are given in Chapter 6 of this article.

2 Methods and data base

Competitiveness has various dimensions. Competitiveness is here defined as the '... sustained ability to profitably gain and maintain market shares' (Martin et al., 1991). Factors influencing profitability are costs and returns. Thus, the comparison of costs and returns of production in agriculture can provide an idea about the competitive situation.

To evaluate the competitiveness of the German organic producers a cost comparison has been undertaken as part of an in-depth economic analysis for a total of 11 organic beef producing farms.

The analysis was done within the framework of the International Farm Comparison Network⁴ (IFCN) (Isermeyer et al., 2000; Hemme, 2000). In a first step, the major organic beef producing regions in the countries were selected. This was followed by the evaluation of the production systems for organic beef within these regions. Based on that information, a set of farms was defined in each country in terms of size, type and breed of animal produced, feeding, etc. The last step was to collect the economic and physical information of the typical farms defined above.

The procedure mentioned above was developed in cooperation with local scientific partners and advisors with a sound knowledge of organic beef production in their regions and organic farmers who kindly facilitated information to build the required database.

The resulting data availability was very heterogeneous, in particular with respect to statistical data and the countries Germany and the Czech Republic. Consequently, the research project has a rather explorative character. The data situation can be summarised as follows:

- Comparable statistical data are not available for the organic sector (for example on production, its spatial distribution, prices, farm structure data).
- The organic farms are in general less specialised than the conventional ones. This results in greater difficulties when analysing the activity 'beef' within the whole farm.
- Due to the regionally adapted forms of production, the organic production of beef presents a wide variety of production systems, which make a comparison more complex.

The analysis of organic beef marketing initiatives was conducted in case studies analysing the institutional factors and the marketing mix influencing the success of organic beef marketing. A main criterion for the selection of the marketing initiatives was their persistence on the organic market.

⁴ More details about the International Farm Comparison Network are found in http://www.ifcnnetwork.org

Expert interviews have been conducted with responsible persons in the supply chain of the marketing initiatives and with persons from institutions and organisations (chambers of agriculture, organic advisors, organic research and education). Secondary data has been used for the description of the institutional framework conditions but also as a complementary data source for the description of the marketing initiatives.

3 Framework for the production and marketing of organic beef

Organic production in Germany, Austria, France, Czech Republic and Argentina has increased in the last ten years (FIBL, 2003).

In all countries analysed, organic production is regulated by law. The certification of organic products follows comparable standards equivalent to the EU Reg. 2092/91. Additional national standards are found in France (stricter version of the EU Reg. 2092/91 and 1804/99) and Austria (Österreichisches Lebensmittelbuch – Codex Alimentarius). German and Austrian organic associations also have additional standards which have to be fulfilled by their members.

The degree of organisation of the organic farmers in organic growers associations differs significantly between the countries. While Germany and Austria each have around ten organic associations, France features only regional organic farmer associations that represent organic farmers in political discussions or coordinate organic advisory services. The other extreme is the Czech Republic with only two organic associations and Argentina with a couple of private groups.

Organic producers in Germany, Austria and the Czech Republic receive government aid both for conversion and for maintaining organic production. In France only a conversion period of five years is subsidised, and in Argentina the organic farmers receive no government support at all.

All European action plans to strengthen organic agriculture focus on the following points: financial support for converting farmers, investments in organic research and advisory services as well as the fostering of cooperation and commitment of the market actors along the supply chain. Furthermore, in the United Kingdom and Austria the use of organic food in public canteens and hospitals is formally recommended in political guidelines. This measure helps to create exclusive sales channels for the organic food sector.

4 Results of the farm level analysis

4.1 Spatial distribution of the production and farm description

The spatial distribution of the organic beef production can be summarised as follows:

- The most important regions for organic beef production in Germany are Mecklenburg-Western Pomerania, Brandenburg, Hessen, Baden-Württemberg and Bavaria. These are the midlands and the alpine regions and the marginal areas in the north-east.
- In France, the production of organic beef basically takes place in the west of the country (Pays de la Loire) and in the permanent pastureland areas of the Central Massif and the Burgundy.
- In Austria, organic beef production concentrates in the areas of Salzburg and Styria with a high share of extensive pasture land located mainly in alpine mountain areas.
- In the Czech Republic, although not yet very extended and usually in combination with cow calf herds, organic production takes place in regions with high shares of pastureland.
- The strong competition between crops and cattle production for land found in Argentina presently forces the Argentinian organic beef production to concentrate in marginal areas, where crop production is not profitable. Buenos Aires, La Pampa and Corrientes are the three most important regions for organic beef production in the country.

Common for all five countries is the heterogeneity of organic beef production. The variety of production systems, animals produced, combination with other farm activities, etc., made both the farm definition and the comparison of production costs a hard task. A total of 11 typical organic beef farms were included in the study. Table 1 shows an overview of the most important indicators of the farms. All data presented are from 2002.

4.2 Economic results

Figure 1 depicts the total returns of the beef enterprise. The total returns consist of beef returns (price per 100 kg carcass weight) and government payments. The government payments are stated in the bars and divided into livestock payments, crop payments, organic and environmental payments, and other payments allocated to the beef enterprise. Figure 2 presents the total costs and the total returns of the beef enterprise. Total costs are stated in the bars as cost from profit and loss account (cash costs plus depreciation) and opportunity cost (for own labour, land and capital). Total returns are beef returns (price per 100 kg CW) from the sale of animals plus government payments, if any.

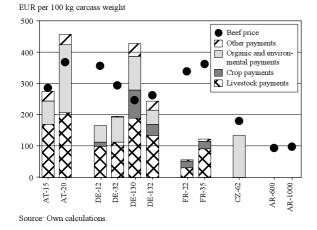


Fig. 1:

Total returns of the beef enterprise 2002

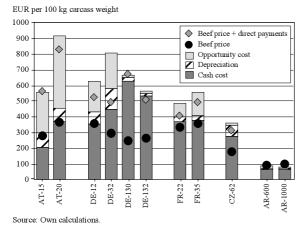


Fig. 2:

Profitability of the beef enterprise 2002

4.2.1 Beef price

Due to the variety of animals produced (see Table 1) and to the fact that one farm can produce more than only one type of animals, Figure 1 presents a weighted average of the producer prices received. This weighted average was calculated as the total beef returns divided by the total weight sold per year. The prices received by the farmers oscillate between 350 \in per 100 kg carcass weight (CW) in DE-12 (farm with direct marketing), France and AT-20 (baby-beef producer) and 100 \notin in Argentina.

4.2.2 Non beef returns

Non beef returns are basically the direct payments to the EU-Members and the Czech Republic. The total amount of direct payments received varies significantly between the farms. The French and Czech farms get below 150 € per 100 kg CW. The two French farms have been working

organically for more than five years and they no longer receive organic payment. The highest values, with more than $400 \in$ per 100 kg CW, are found in AT-20, a babybeef producer with very low slaughter weights leading to very high values when expressed per kg CW, and DE-130, a farm with steer finishing, which receives very high livestock payments [2 * special premium for male bovine animals] and high area related payments. In DE-130 and AT-20 the direct payments are even higher than the beef returns.

4.2.3 Total costs: cash costs, depreciation and opportunity costs

The highest total costs of production are found in three German farms and the Austrian baby-beef producer with more than $600 \notin$ per 100 kg CW. The cost level of the French farms and of the bull finisher in Mecklenburg is slightly lower with 500-600 \notin per 100 kg CW. The lowest production costs are found in the Czech Republic (around $350 \notin$) and Argentina (< 100 \notin).

The cash costs reach between 37 % of the total costs in AT-15 (small family farm with a high share of own land) and around 94-95 % in DE-130 and DE-132 (large commercial farms with high share of rented land). The latter must pay almost all production factors, having a higher cash cost share, and react more sensitively to reductions in market prices or costs increases than the family farms.

The share of depreciation in the total costs lies between 3 and 4 % in DE-130 and DE-132 and 19 % in CZ-62. The highest values for depreciation correspond to AT-15 (around 90 €) and DE-32 (around 130 €). Argentina, in contrast, reveals very low values for depreciation (4 to 11 € per 100 kg CW) with its pasture based finishing without stables and very few machines.

The costs of the profit and loss account are relevant for the short- to medium-term profitability of the farms. For a long term comparison of the family and commercial farms, it is relevant to include the opportunity costs in the analysis. High opportunity costs are found in the family farms in Austria, Germany (DE-12 and DE-32) and France. These farms have, compared to the farms in east Germany, relatively low cash costs. In the family farms, labour has the highest share in the opportunity costs.

4.2.4 Profitability

Only AT-15, DE-130 and both Argentinian farms cover the full costs of production with their total returns (beef price plus direct payments), thus making an entrepreneur's profit (below $21 \in$ per 100 kg CW), in Argentina even without direct payments. DE-12, the French farms and AT-20 realise a profit from the profit and loss account (cover cash costs and depreciation). DE-32 and CZ-62 cover their cash costs but not the costs from the profit and

Table 1:

Farms description

Name	AT-15	AT-20	DE-12			DE-32		DE-130	DE-132
Region	Styria	Styria	Bavaria		Hessen		Mecklenburg-Western Pomerania		
Legal form	Family farm Family farm		Family farm	Family farm		Family farm		Limited liability company	
Land availbility Whole farm (ha) Own land (%) Grassland (%)	17 100 % 100 %	31 100 % 100 %	15,5 58 % 16 %		75 27 % 91 %		990 10 % 67 %	730 10 % 59 %	
Labour (1 labour unit - LU =	2200 hours)								
Total LU Family labour LU	0,3 0,3	1,9 1,9	0,5 0,5			0,8 0,8		8,9 0,0	6,2 0,0
Other farm activities	Forestry	Cow calf Forestry	Crops Poultry, Pigs Direct marketing		-		Crops	Crops	
Breeds	Simmental	Limousin x Simmental	Simmental			Limousin x Simmental		Angus/ Limousin x	Simmental x Limousin/Angus
Animal's origin Dairy/Cow calf Own/Purchase	Dairy P	Dairy Cow calf P O		Dairy P			Cow calf O		Cow calf
Animals sold per year	15 Steers	20 Weaners (Baby-beef)	12 Steers			18 Steers	14 Heifers	130 Steers	132 Bulls
Weight Beginning (kg LW) End (kg LW)	150 631	birth 405	209 733			182 650	180 596	280 580	340 520
Age Beginning (days) End (days)	132 735	birth 315	195 918		195 780	195 750	270 670	270 440	
Duration finishing period (days)	603	315	723		585	555	400	170	
Daily weight gain (g/day)	797	1.162	725		800	750	750	1.059	
Dressing percentage (%)	53 %	56 %	54 %			54 %	52 %	54 %	58 %
Name	FR-22	22		FR-35		CZ-62		AR-600	AR-1000
Region	Pays de la Loire	Pays de la Loire		Limousin		South Bohemia		La Pampa	Buenos Aires
Legal form	Family farm		Family farm		Stock corporation		Family farm	Family share company	
	Family fami				95 40 % 90 %		436 0 % 98 %		
Land availbility Whole farm (ha) Own land (%) Grassland (%)	94 0 % 91 %		95 40 %			0 %		520 73 % 100 %	2.662 19 % 80 %
Whole farm (ha) Own land (%) Grassland (%)	94 0 % 91 %		95 40 %			0 %		73 %	2.662 19 %
Whole farm (ha) Own land (%) Grassland (%) Labour (1 labour unit - LU = 2200 ho Total LU	94 0 % 91 %		95 40 %			0 %		73 %	2.662 19 %
Whole farm (ha) Own land (%) Grassland (%) Labour (1 labour unit - LU = 2200 ho Total LU Family labour LU	94 0 % 91 % ours) 1,2		95 40 % 90 %			0 % 98 % 10,8		73 % 100 % 2,1	2.662 19 % 80 %
Whole farm (ha) Own land (%) Grassland (%) Labour	94 0 % 91 % 0urs) 1,2 1,2		95 40 % 90 % 1,5 1,5			0 % 98 % 10,8 0,0		73 % 100 % 2,1	2.662 19 % 80 %
Whole farm (ha) Own land (%) Grassland (%) Labour (1 labour unit - LU = 2200 hd Total LU Family labour LU Other farm activities	94 0% 91% ours) 1,2 1,2		95 40 % 90 % 1,5 1,5			0 % 98 % 10,8 0,0 Crops		73 % 100 % 2,1 0,6 - Angus/	2.662 19 % 80 % 6,9 0,4 Cow calf Angus/
Whole farm (ha) Own land (%) Grassland (%) Labour (l labour unit - LU = 2200 hd Total LU Family labour LU Other farm activities Breeds Animal's origin Dairy/Cow calf Own/Purchase Animals sold per year	94 0% 91% 1,2 1,2 - Charolais Cow calf	16 Cows	95 40 % 90 % 1,5 1,5 - Limousin Cow calf	11 Heifers	6 Cows	0 % 98 % 10,8 0,0 Crops Piedmont Cow calf	29 Heifers	73 % 100 % 2,1 0,6 - Angus/ Hereford Cow calf	2.662 19 % 80 % 6,9 0,4 Cow calf Angus/ Hereford Cow calf
Whole farm (ha) Own land (%) Grassland (%) Labour (1 labour unit - LU = 2200 he Total LU Family labour LU Other farm activities Breeds Animal's origin Dairy/Cow calf Own/Purchase Animals sold per year Weight Beginning (kg LW)	94 0% 91% 1,2 1,2 - Charolais Cow calf O 6		95 40 % 90 % 1,5 1,5 - Limousin Cow calf O			0 % 98 % 10,8 0,0 Crops Piedmont Cow calf 0 33		73 % 100 % 2,1 0,6 - Angus/ Hereford Cow calf P 	2.662 19 % 80 % 6,9 0,4 Cow calf Angus/ Hereford Cow calf O/P 1.000
Whole farm (ha) Own land (%) Grassland (%) Labour (l labour unit - LU = 2200 hd Total LU Family labour LU Other farm activities Breeds Animal's origin Dairy/Cow calf Own/Purchase Animals sold per year Weight Beginning (kg LW) End (kg LW) Age Beginning (days)	94 0% 91% ours) 1,2 1,2 - Charolais Cow calf 0 6 Heifers 250	Cows 660	95 40 % 90 % 1,5 1,5 - Limousin Cow calf 0 18 Steers 280	Heifers 450	Cows 590	0 % 98 % 10,8 0,0 Crops Piedmont Cow calf 0 33 Bulls 250	Heifers 200	73 % 100 % 2,1 0,6 - Angus/ Hereford Cow calf P 600 Steers 150	2.662 19 % 80 % 6,9 0,4 Cow calf Angus/ Hereford Cow calf O/P 1.000 Steers 150
Whole farm (ha) Own land (%) Grassland (%) Labour (1 labour unit - LU = 2200 hd Total LU Family labour LU Other farm activities Breeds Animal's origin Dairy/Cow calf Own/Purchase Animals sold per year Weight	94 0% 91% ours) 1,2 1,2 - Charolais Cow calf 0 6 Heifers 250 685 275	Cows 660 754 1.460	95 40 % 90 % 1,5 1,5 - Limousin Cow calf O 18 Steers 280 675 275	Heifers 450 590 759	Cows 590 655 1.460	0 % 98 % 10,8 0,0 Crops Piedmont Cow calf O 33 Bulls 250 656 210	Heifers 200 400 210	73 % 100 % 2,1 0,6 - Angus/ Hereford Cow calf P 600 Steers 150 484	2.662 19 % 80 % 6,9 0,4 Cow calf Angus/ Hereford Cow calf O/P 1.000 Steers 150 450 180
Whole farm (ha) Own land (%) Grassland (%) Labour (1 labour unit - LU = 2200 he Total LU Family labour LU Other farm activities Breeds Animal's origin Dairy/Cow calf Own/Purchase Animals sold per year Weight Beginning (kg LW) End (kg LW) Age Beginning (days) End (days)	94 0% 91% ours) 1,2 1,2 - Charolais Cow calf 0 6 Heifers 250 685 275 820	Cows 660 754 1.460 1.583	95 40 % 90 % 1,5 1,5 - Limousin Cow calf O 18 Steers 280 675 275 1.003	Heifers 450 590 759 1.003	Cows 590 655 1.460 1.560	0 % 98 % 10,8 0,0 Crops Piedmont Cow calf O 33 Bulls 250 656 210 690	Heifers 200 400 210 600	73 % 100 % 2,1 0,6 - Angus/ Hereford Cow calf P 600 Steers 150 484 150 725	2.662 19 % 80 % 6,9 0,4 Cow calf Angus/ Hereford Cow calf O/P 1.000 Steers 150 450 180 726

loss account (cash costs plus depreciation). Both farms live at the expense of their depreciation. The German farm DE-132 is making a loss, not even covering its cash costs.

4.3 Preliminary conclusions

The German farms have an advantage on the return side compared with the French ones. However, this advantage is due to the high direct payments and not to a higher beef price. Compared to Austria the situation is different: beef prices are at comparable levels for similar end products and the share of direct payments in total returns is also quite high for the Austrian farms. The policy dependency is thus much higher in Germany and Austria than in France (and at the moment in the Czech Republic), this could have a negative effect for the future competitiveness of the German producers.

Countries with lower costs of production and lower returns than Germany could mean a threat for the German producers, since higher prices in Germany would be an export incentive for the competitors with lower production costs. This is the case for the Czech Republic and Argentina. Austria is not in this situation since both prices and costs for comparable end products are at similar levels. French farms, with slightly lower costs but significantly higher prices than Germany, should not have an incentive to export to Germany. The fact that the direct payments after the conversion period are the lowest among the EU-Members supports this statement even more.

Whether an export incentive actually becomes an export depends on more factors than only the price relation. Market access, quality, characteristic and image of the product, as well as the potential for an increase in production, and an increase in the net exports, are other factors which have to be considered.

The farm-level analysis shows that profitability of the analysed farms depends strongly on the level of beef prices. In the long run it is likely that with diminishing government payments, higher costs of production need to be covered by higher organic beef prices. However, results further suggest that, at least in Germany, organic beef production is less problematic than organic marketing. Organic beef cannot be sold with an organic price premium in all countries and price levels do not only differ between countries but also between farms. The price level in the farms is highly influenced by the marketing organisation. In the following section a selection of important organic beef marketing initiatives is analysed in order to identify institutional success factors and marketing mix instruments.

5 Results of the marketing initiatives analysis

5.1 Sales channels for organic beef

As Table 2 shows, the importance of different sales channels for organic beef differs in the countries analysed.

In all countries analysed, supermarkets are the most important sales channel for organic beef. Although Austria's organic food sector is dominated by the marketing activities of the two most important supermarkets BILLA/ Merkur and Spar, and supermarkets have a 72 % return share for organic food, they only account for about 50 % of organic beef sales (Hamm et al., 2002). Butcheries are an important sales channel for organic beef in all analysed countries. In Austria they are even more important than in the other countries. In France 10 % of organic beef is sold in organic food shops, while in the other countries organic food shops are of minor importance. Direct sales are the third sales channel for organic beef. An Austrian particularity is the relatively high percentage of away-fromhome-consumption (gastronomy, canteens) compared to the other analysed countries. Home-delivery-services through mail order or Internet are a British particularity for organic beef marketing, and are included in the percentage of direct sales.

5.2 Organisation of the supply chain for organic beef

As shown in Table 2 a large part of organic beef in France is sold in supermarkets. While Carrefour is the French leader for organic food in general, most organic beef is sold in the supermarkets of Auchan. The slaughtering for Auchan is organised mainly by two slaughterhouses (OFIVAL, 1999). In some regions an own marketing organisation for organic beef has been established. In other regions conventional producer groups organise the logistical part of organic beef marketing (OFIVAL, 1999).

Austria's agriculture is dominated by small-scale farming. The procurement of organic cattle is thus quite expensive and difficult to organise. Therefore, producer groups or cooperatives organise the collection and transport of animals to central slaughterhouses. In the past, the organic association ERNTE played an important role for organisational issues and logistics (Dienel, 2001). The Austrian Table 2:

Share of sales (%) channels for organic beef by value in 2000

	Germany	Austria	France	United Kingdom	Switzer- land
Supermarkets	33	50	70	80	75
Butchers	25	20	10	15	5
Organic					
food shops	7	-	10	-	5
Direct sales	25	20	8	5	10
Restaurants	10	10	2	-	5

Source: Hamm et al., 2002

organic beef market consists of two parts: a well organised supply chain for high quality baby beef, and a fluctuating market for low quality beef (i.e. cull cows from dairy breeds).

In the United Kingdom the supply chain is dominated by the supermarkets. As the organic food market is relatively young, demand was higher than supply in the past. Relationships to import organisations are still strong and domestic producers must further organise the domestic supply. The supermarkets procure the organic beef from imports, from processing enterprises, from producer groups or from organised organic traders (Bassett, 2003). The large supermarket chains work almost exclusively with big abattoirs and processing enterprises. Producer groups try to bundle the demand and some are quite successful due to their long experience, but it seems to be difficult to get a direct contact to the supermarkets. This is a British particularity, whereas in the other countries analysed there is a direct link between producers and the responsible persons in the supermarkets.

5.3 Success factors

Table 3 gives a brief overview of the analysed marketing initiatives. It shows organisational issues and the marketing mix of the initiatives.

5.3.1 Institutional factors

Not only political or natural framework conditions contribute to the success or failure of marketing initiatives. In Austria, the supermarkets, especially BILLA/Merkur were an important driving force for the development of the organic food market. Since a wide spectrum of consumers is targeted, supermarkets must also be involved in organic food marketing. Supplying a supermarket is a challenging task, especially for small marketing initiatives. An important factor for a lasting relationship is reliability and the supply of homogeneous products.

An institutional success factor for marketing initiatives is experience in business and conventional beef marketing. All interviewed persons explained that their experience in conventional marketing made it easier to succeed in the organic market.

5.3.2 Product policy

One main result of the conducted case studies is the fact that organic beef can only be sold successfully if it is a premium product based on a pre-defined quality standard. To establish a quality standard, this standard must first be defined. Quality measures for beef can be physical measures such as slaughter weight or carcass classification (for example exclusion of certain classification grades for organic beef marketing), breeds, but also other attributes like animal welfare aspects. Advisory services help to improve on farm product quality. Traceability is a quality factor with increasing importance.

5.3.3 Price policy

Organic beef producers in Germany often have to face strongly fluctuating producer prices. A price premium for organic beef can not always be realised, because a large part of German organic beef is sold conventionally. In the past, organic beef prices were sometimes linked to the conventional beef price. In times of conventional food crises, the organic beef price automatically went down with the falling conventional beef price. Therefore, organic beef producers and their organisations should try to decouple organic beef prices from the conventional beef price. A main characteristic of organic food markets in the past has been alternating times of deficits and oversupply. The stabilisation of producer prices is therefore an important but difficult task for organic beef marketing initiatives. One marketing initiative implemented an equalisation fund to keep the prices stable.

5.3.4 Distribution policy

Beef carcasses have got the disadvantage that hind quarter cuts can be more easily sold than forequarters. In all analysed countries this problem remains more or less the same. A main task for marketing initiatives is to find sales channels for the forequarters. Higher transport and logistical costs lower the competitiveness of organic beef farms. Therefore, cooperation between organic marketing initiatives and conventional cooperatives in terms of logistical or organisational infrastructure can be an option to decrease costs in the supply chain. A continuous supply is crucial for supermarkets selling organic products. But, organic food production is even more dependent on natural conditions than conventional production, and volumes are often difficult to plan (Hamm et al., 2002). Therefore, the analysed marketing initiatives with lasting customer relationships to supermarkets implemented planning systems to manage a continuous supply.

5.3.5 Communication policy

Premium products like organic beef need special effort in consumer oriented communication. Most of the analysed marketing initiatives invest a lot of money and time in consumer information. But an intensive communication along the supply chain is a key factor for success, too.

Table 3: Description of the marketing strategies analysed

Description	Austria		Switzerland		
Marketing initiative	Styria Beef	Ja! Natürlich Jungrind	Spar Bio-Weiderind	Bio Weide-Beef	
Year of foundation	1983, since 1994 organic	1996	1999	2000	
Organisational structure	Trademark of the Styrian Beef Breed Association	Trademark	Trademark	Trademark	
Beef products	Baby beef	Baby beef, calves	Baby beef	Heifers, steers	
Number of cattle sold per year	2,500	n.a.	n.a.	2,300	
Type of cattle	Continental beef breeds only (Simmental x Limousin)	Continental beef breeds only	Continental beef breeds only (Simmental x Limousin)	Continental beef breeds, dairy crossbreeds	
Sales channels	Supermarkets/retailers, weekly markets/farm shops, butcheries, can- teens/restaurants, export	BILLA/MERKUR supermarkets	SPAR supermarkets	MIGROS supermarkets	
Product policy	Only E+R baby beef, defined slaughter ages and weights, 100 % organic feeding	Only baby beef from cow calf enterprises, 100 % organic feeding	Only E+R baby beef, defined slaughter ages and weights, 100 % organic feeding	Minimum R3 (carcass quality)	
Price policy	Price decoupled from conventional price	Price decoupled from conventional price	Price decoupled from conventional price	Weekly telephone conferences on producer price	
Communication policy	Advertisement material for direct marketing, high investments in advertise- ment when building up the trademark	Point of sale activities, advertisement for the organic trademark in tv, magazines	Point of sale activities, advertisement	Point of sale activities, homepage	
Description	France			United Kingdom	
Marketing initiative	Coopablim	Bretagne Viande Bio	Biobourgogne Viande	Eastbrook Farm Organics	Graig Farm Organics
Year of foundation	1995	1991	1980	1986	1988
Organisational structure	Cooperative	Union of producers, butcher and retailers	Producer group	Trademark + family farm	Trademark + producer group
Beef products	Milk calves, heifers, steers, cows	Heifers, steers, cull cows, calves	Heifers, steers, cull cows, calves	Heifers steers, calves from dairy	Heifers, steers
Number of cattle sold per year	n.a.	1,700	1,200	235	2,000
Type of cattle	Continental beef breeds, Limousin breed mainly	Continental beef breeds, some dairy cows	Continental beef breeds, Charolais breed mainly	British and continental beef breeds, dairy crossbreeds	British and continental beef breeds
Sales channels	Supermarkets, farm shop, own butchery	Supermarkets, farm shop, own butchery	Supermarkets, farm shop, own butchery, weekly markets	Supermarkets, home delivery service	Supermarkets, farm shop, own butchery
Product policy	Defined slaughter weights	Focus on traceability	No maize in feeding ration (GMO problem), regional slaughter- houses with HACCP certification, 10-15 days maturation	24-30 month old heifers/steers on pasture, gently transport, long maturation of beef (> 14 days)	24-30 month old heifers/steers on pasture, gently transport, long maturation of beef
Price policy	Price grid fixed by SETRABIO* (beef sales to supermarkets)	Price grid fixed by SETRABIO* (beef sales to supermarkets), price committee fixes prices for other sales channels	Price grid fixed by SETRABIO* (beef sales to supermarkets)	Price decoupled from conventional price	Price decoupled from conventional price
Communication policy	Organisation of organic fairs, information in schools, newsletter	Intensive dialogue in the supply chain; few point of sale activities in organic food shops	Organisation of organic fairs, point of sale activ- ities, demonstration farms	High investment in consumer information, newsletter, homepage, farm visits, articles in magazines	Advertisement in magazines, farm visits, point of sale activities in organic food shops

* SETRABIO is a union of French organic food processors. Source: Own results.

6 Conclusions for the competitiveness

In Austria and France, prices for organic beef are at the same level or even higher than in Germany. As long as this is the case, there is no incentive for them to export organic beef to Germany. Due to the price difference there is an incentive for Germany to export to France or Austria. However, this does not seem to be very realistic due to trade and consumer preferences for national or regional products.

The results also show that especially the French organic beef producers have been able to organise the marketing in a way that allows them to obtain relatively high prices. This is to a certain degree also the case for Austria. Higher prices tend to decrease the share of direct payments in the total returns of the farms. This means a lower policy dependence than in the German farms.

Contrary to Austria and France, prices and production costs in the Czech Republic and Argentina are lower than in Germany, and they could create import pressure on the German market.

The marginal areas in the Czech Republic show an expansion potential for organic beef production. However, the production of bulls should be changed to steers and/or heifers. For the suckler cow farmers the production of baby-beef could be an interesting alternative. The expected increase in the costs of production after the accession to the EU would mean a decrease in cost advantage. With the assumption that in the mid-term the organic products will get an "organic price", an increase of organic production can be expected. Whether this production is internally consumed or goes to export depends on the price differences between the markets.

Due to its low production costs and the similarity between conventional and organic production, Argentina has a huge potential to increase its organic production and its exports. At the time being there is neither a demand nor proper market access for Argentinian organic beef. The demand for a reasonable amount of organic beef would be a requirement for this market segment to develop and is not the case at the moment. Additionally, it should be considered that also under liberalised trade, the expansion potential for organic beef production in Argentina has its limits. Reasons are:

- possible increases of domestic beef prices as a result of higher import prices might lead to raises of export taxes to keep the domestic price level down,
- the competition with crop production,
- the use of GMO seeds in most of the beef finishing regions, and
- the constraints on the expansion of beef finishing beyond the Humid Pampa.

In the medium term, no import pressure from Argentina should be expected. In the long term, however, and under the assumptions that a) a market liberalisation takes place and b) demand on the German market grows, Argentina, due to its costs advantage and meat quality, could be a serious competitor for the German producers.

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