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SITUATION AND PERSPECTIVES ON THE LIGHT
OF THE EXPERIENCE OF A SMALL GROUP OF FIRMS LOCATED
IN THE VENETO REGION

by
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Organic meat in Italy: situation and perspectives on the light of the experience of a small group of firms located in the Veneto Region

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Abstract. Although organic meat consumption has recently shown a great percentage growth in some EU countries, different problems have risen in order to supply the markets with adequate levels of organic meat, especially in countries like Italy, where conventional meat production is mostly based on very intensive methods.

The first part of this paper is a review of the production and market situation of organic meat in Italy, whereas the second is a preliminary attempt of examining the structural features and the marketing strategies of a pioneer group of firms which have begun to produce and/or to process and market different types of organic meat in the Veneto Region, the most important area for the production of conventional meat in Italy.

Besides some satisfactory results, the research has shown many difficulties related either to the costs or to the prices faced by the organic farms. The costs are mainly due to the wide gap between organic production techniques and the conventional ones; the prices are typical of the building up of a new niche market. By now, these difficulties seem to prevent a rapid expansion of domestic supply of organic meat in Veneto, although specific research programs could overcome some of them.

Keywords: Organic meat production, organic meat market, breeding conversion.

1. Organic meat situation in Italy

The regulation context has not been too much encouraging for organic meat production. In fact, although in 1991 EU Reg. 2092, has established a series of technical norms regarding exclusively plant organic products, it was only in 1999 that EU Reg. 804 regulated animal organic production. Moreover, within the agro-environmental measure provided by EU Reg. 2078 granted per hectare subsidy to organic agricultural cultivations, but no aid was allowed for organic breeding. Also Reg. 1251/99, which

gives financial support to organic agriculture for a five-year period, by means of the regional Rural Development Plans (RDP), has moved on the Reg. 2078 path, targeting aid only to organic crop.

Despite this situation, consumption of organic meat has increased strongly in EU countries and in Italy too during the last few years, due to recent food scandals that have hit the food industry. In particular the BSE disease return in 2000 has arisen again the interest for organic meat from consumers who are more aware of the problems related to a healthy nutrition. Only now organic meat is beginning to be sold appear in more and more outlets, and there are encouraging signs that it may leave the micro-niche in which it has remained up to now.

1.1. Production

At the end of 2000, the Italian organic certified surface (including the one in conversion) was about 1.070,000 hectares, approximately 7% of the Italian total usable agricultural land. In comparison with the previous year, a 12,2% increase has been taken place, depending especially upon large size farms, although the rate was lower than in the previous five years (approximately 20% per year). The highest increment happened between 1997 and 1999, the period of widest implementation of the EU Reg. 2078/92, which also supported organic agriculture methods.

According to the last available data, at the end of 1999 there were 468 organic livestock farms, of which more than 60% were located in northern Italy. In particular 16% were found in the Province of Trento and 11.8% in Veneto, with an occurrence on total organic agricultural farms respectively of 22.2% and 7.4% (Lunati, 2001/b).

In 2000, 1,423 animal breeding farms have requested to join the national organic certification system. A large amount (47%) were meat producers, 28% were specialized in milk production and the remaining quarter were mixed farms (Lunati, 2001/a).

From the production viewpoint, there seems to be two organic farming techniques: a more intensive one, which implies modest changes in the existing structures, and a more extensive one, which is mostly adherent with the principles of the organic animal production regulation. In perspective, the former appears to be more finalized to a mass market, the latter should be more related to a niche market. Operators in the more extensive one may not obtain immediate benefits from the exploitation of mass market, but they could achieve, in the medium term, a greater flexibility in the productive choices and be less exposed to competitive pressures, thanks to lower fixed costs, especially if they will succeed in connecting organic production with typical elements (di Marco, 2001).

From an economic viewpoint, a recent research (Cozzi et al., 2001) has enlightened a considerable increment in the per head production cost of organic beef meat in comparison with meat conventionally produced. In particular, the greater increase regards feeding expenses (about 30%), partly due to the absence of a true market for organic feedings stuffs; moreover high investment depreciation and a cost for control and certification should be added, whereas health care expenses are lower. Revenues, which increase either by greater slaughtering weight or by higher price, determine a 50% increment in the per head net income. However, if budget is related to the production cycle span, such advantage vanishes, and net income is 25% lower if budget is carried out within a five-year period for the overall business, especially due to limitations on stocking. Because of such current lack of competitiveness, a massive

organic conversion for the Italian meat production does not seem reasonable, not only for beef, but also for other meats, for which high production costs are reported too; this happens especially for the chicken meat production (Didero and Troiani, 2001). Other authors (Rossi and Gastaldo, 2001) have shown that the per head investment costs for structures used in the organic pork meat production are not higher than those in the conventional breeding; however appraisal is more difficult if you need to adapt already existing structures rather than to build new ones.

1.2. Market

Although there are various technical-economic problems at production level, it must be said that also distribution is still very incomplete, because certified operators who follow breeding production in the chain are scarce too. Moreover, transactions along the chain still regard minimal exchange volumes. The market share is somewhat uncertain (from 0,5 to 2% on the total value of the sold meat) and most of the meat is imported, given the huge domestic production deficit (Baron, 2000).

Organic meat is available in approximately 120 sale outlets, which are located mostly in northern Italy, where 70% of national consumption occurs. This happens for two reasons: a growing interest from operators in the great organized distribution (GOD), where we can estimate that, in some cases, meat accounts already for 4-5% of total organic food sales, and interest from a network of retail shops, which have specialized in supplying organic meat.

Both the traditional butcheries and the GOD have shown a remarkable interest for organic meat, as long as dealing it does not involve excessive logistic and

managerial difficulties (Didero and Troiani, 2001). A recent survey, which was carried out in Piedmont, has examined the opinion of chain operators who follow the breeding phase (Marengo et al., 2000) and has drawn some interesting indications. With reference to slaughterhouses, there are no particular difficulties, provided that processing organic meat separately from conventional meat is thought being a feasible operation, which involves low additional costs (from 1% for cattle meat to 5% for chicken meat). At the small conventional retail level (butcher shops) the research has found a remarkable interest for organic meat, in particular for beef (53%), followed by chicken (27%). Moreover, within these operators, preference for fresh meat has appeared to be greater (72%) than that for processed meat (22%). 87% of them think a 20% premium price over the conventional meat to be reasonable and more than half of them would be willing to accept a 30% maximum increment. Proper information, high quality and affordable prices are ranked as the key factors to boost up organic meat in this trade channel. As far as organic specialized shops, although they admit, in some cases, a willingness to pay a maximum 50% premium price for organic meat among their customers, they have revealed a lower propensity to the organic meat sale than the butcheries, but a little higher interest for the poultry meat in comparison with beef and a preference for preserved meat versus fresh meat. Also the GOD operators have shown enough interest for organic meat, in particular for poultry and beef, but they think that it is too expensive for their usual customers, provided that a 30% would be the maximum acceptable premium price in some cases, although 15% is what would be more adequate for most of them.

Finally, there is a substantial availability to deal with organic meat, which is based perhaps on an optimistic view of its market perspectives, although the interests of

the various distribution channels seem to be differentiated. The strengthening of the organic meat market appears mainly associated with its spreading among the GOD sale outlets and the butcheries, but, at least in the short period, the requirements of the GOD do not appear to be met by domestic supply, because supermarkets are not available to deal small quantities and in discontinuous way. During an intermediate period also the specialized shops can get a certain role, whereas the difficult joint presence of both the meat kinds at the same butcheries (given that it seems very difficult to sell all the organic meat already sized and packed) limits the organic meat option to a small number of butcheries.

Direct selling is not easy too. On this regard, the experience of some producers of the Marche Region who have undertaken the production of organic meat as an opportunity for better rewarding their labor appears to be meaningful (Ansaloni and Bellavia, 2001). While those who have kept on selling live cattle have not achieved any premium price, those who have begun to pack a variety of beef cuts at farm level have obtained a price which is considered satisfactory by half of them. This is due to the fact that most of their customers were people living in rural areas for which price is still the determining factor in deciding the purchase of food products. Therefore, in these circumstances, the association of organic producers in cooperative firms appears to be the best option, in order to provide supply concentration, which is a must in order to penetrate into new markets.

As for other organic products, organic meat requires a particular attention to price policies and a strong promotional action linked to information to the consumer on its features. An average 50% premium price is currently applied for organic meat, whereas for the dairy product it is considerably lower (19%). A reasonable price should

not be higher than 30-40% in relation to conventional meat (and 20% for high quality cuts), which is a level that some supermarkets were gradually approaching at the end of the 2000 (Didero, 2001/a).

1.3. Perspectives

Databank (2001) forecasts a 50% organic food sale increase in the GOD in the short term, with meat having a relevant contribution on it. The organic meat segment has a great competitive advantage, thanks above all to the recent food alarms, and to the consumers' requests of food safety.

Meat does not have a primary role within the organic products and projected forecasts foretell an approximately 4-5% share in the total meat consumption at the end of the next decade (Menghi et al. 2001). Such long run target, rather small if compared with other organic products (10% or more), relies on the fact that organic meat is a very different product in relation to tenderness, taste characteristics and price from the conventional one, which consumers know very well. Moreover, the low level of standardization of organic meat (especially for color and tenderness) can be a barrier to buying it again also for those who are initially favorable to its consumption (Didero and Troiani, 2001).

Current national supply is not able to meet the demand. This is particularly important for the GOD, which, having to buy larger quantities than other channels is very often forced to rely on imports especially from Austria, Germany and the Netherlands, as breeders who are able to satisfy adequately the GOD quantity requirements do not exist in Italy at present. For this reason, the main problem, which

now affects all organic meat operators, is how to meet the market demand. In this context the organization of the domestic supply, which is closely related to the organic breeding farm profitability, plays a crucial role in supplying the market in a sufficient and continuous way, without relying exclusively on imports (Marengo et al. 2000). The problem is now also limiting the use of organic meat spreading in the school catering, for which city administrations can pay higher prices than other consumers (Didero, 2001/b).

In the case of beef meat, the best perspective seems to regard both the Italian traditional races, as Chianina and Marchigiana and other French tough races. The enhancement of indigenous races, which are endowed with remarkable robustness, represents one of the most important aspects of organic animal breeding oriented to meat production. In fact, the local characteristics of the raised race can find an added value multiplier by means of the safety of the production methods and the reduced environmental impact, which organic production methods can provide. For Italian breeders, organic meat is an opportunity to be developed especially where it is easier to put into effect extensive breeding techniques and, therefore, it may be a way to revitalize some mountain and hill areas where intensive breeding is too expensive; on the contrary, its growth appears less encouraging in the Po Valley productive situation (Baron, 2000).

Perplexities, instead, have been raised about organic pig breeding (Menghi et al., 2001): it appears hardly manageable without some medicines and also because heterogeneity in traded meat is frequent. Moreover, the scarcity of some organic herbs which are needed in processing it; gives the whole meat, which is conserved by using only salt, a better opportunity than meat obtained through a milling process.

2. Result from a small sample of Venetian firms dealing with organic meat

Just as the Italian meat industry also the Venetian organic one has started later than other organic product sectors, because of the lack of a clear legal reference frame and a low market demand. Only some year ago organic meat was an unknown product not only for most of the consumers but also for agricultural producers. In the nineties, organic animal production experiences in Veneto were very rare and limited to people who tried to recuperate traditional breeding methods, in particular as far as poultry breeding is concerned. They tried to adjust them to the rules proposed by the organic agriculture association, which giving the lack of a specific regulation, were willing to certify as organic the animal production obtained by applying the techniques recognized by the IFOAM (International Federation of Organic Agriculture Movements).

Facts previously mentioned have recently widened the operators' interest also in this Region, suggesting undertaking a research in order to explore this newborn industry.

The survey relates to eight enterprises: of these two belong exclusively to the organic meat processing and trading phases, while the others six are involved also or solely in the meat production phase. Within these, one is specialized in sheep meat, one in pork meat, two in poultry and the remaining two are committed to beef meat. The sample size has been an unavoidable choice, given the very limited presence of firms involved in organic meat within the regional territory. In fact, very few farms are already fully converted to the organic meat production techniques and totally to

regimen, and the organic meat-processing ring of the chain is still at an embryonic stage.

The eight enterprises are scattered as follows:

in the Venice Province: the smaller size processing firm;

in the Verona Province: the larger size processing firm and the smaller size cattle breeding farm;

in the Padua Province: the larger size cattle breeding farm, the pig breeding farm, the sheep breeding farm and the smaller size poultry breeding farm;

in the Treviso Province: the larger size poultry breeding farm.

The data presented here have been obtained by means of direct interviews of farm entrepreneurs and firm managers. They were carried out in the second half of 2001, with the aid of an *ad hoc* questionnaire.

2.1. Some structural characteristics of the organic meat breeding farms

With the exception of the larger cattle breeding, which has a separated sale management by having created a simple society, the five breeding farms are all individual firms. The breeding farm dimension range is somewhat wide: the agricultural usable surface varies from 5 hectares of the larger size poultry breeding farm to 220 hectares of the farm with the sheep flock (Table 1). In the larger cattle breeding farm and in the pig one, the surface in conversion is still wider than that already converted to organic agriculture, moreover in nearly a third of the surface of the latter, conventional agriculture is still going on, as well as in the larger poultry farm, where three vineyard hectares are cultivated conventionally. This was a wine farm which has undertaken the

organic poultry by using two vineyard hectares as pasture place for the reared fowls; additional feeding is supplied by three rented hectares of arable land in order to grow cereals and the remaining feed deficit is satisfied by buying organic feeding stuff. In the second poultry breeding farm, organic meat production has currently a still marginal function, situated in a context not only of a multi-crop organic farm (an orchard and a vineyard are present beside the arable land surface), but also a multifunctional one, giving that the farmer cultivates specific crops for feeding game. Only the sheep farm represents an exclusive breeding farm, where 20 hectares are hayed and the remaining is pastureland. The cattle breeding farms have also some orchard and vineyard surfaces, although we have to observe that, in the case of the larger one, the size of the vineyard is rather small if compared with that of the arable land.

Table 1: Surface and replacement value of the rural buildings in the sample breeding farms

Breeding farms	Usable agricultural surface (ha)			Replacement value of rural buildings (Euros)
	Total	Organic	In conversion	
Cattle 1 (Padua)	80,0	33,0	47,0	700,000
Cattle 2 (Verona)	16,0	16,0		280,000
Sheep (Padua)	220,0	220,0		135,000
Poultry 1 (Padua)	8,0#	5,0		125,000
Poultry 2 (Treviso)	11,1	10,6	0,5	350,000
Pig (Padua)	25,0	7,7	9,5	150,000

Of which 3 ha are rented

The replacement value of rural buildings appears enough correlated with the farm surface: it seems rather low in the larger poultry breeding and in the sheep one, due to particularly unrefined animal shelters.

As far as capital invested in animals, we notice that (Table 2) the first cattle breeding farm, equipped with two barns, each one 500 square meters wide, displays a productive cycle longer than the other (it goes from the weaning to a higher beef weight); moreover it diversifies its own supply by a supplementary hens production, based on a longer cycle than the same species receives in both the poultry breeding

farms. A multiple breeding system characterizes also the farm located in the Treviso Province, although turkeys and Guinea fowls give a decidedly lower contribution to the overall revenues than chickens. In the sheep breeding farm, animals are maintained in the pasture without any shelter all year around, but specific boxes are used in the pre and post-birth period. Also the pig breeding is based on rational pasture, for which electrified fencings and plain sheds have been built. In all the other cases the open stall system is adopted in compliance with organic breeding rules. Both the cattle breeding farms and the larger poultry breeding farm sell slaughtered animals, while the others deliver live weight animals.

Table 2: Livestock characteristics of the sample breeding farms

Breeding farms	Animal type	No. of heads	Initial weight (Kg)	Final weight (Kg)	Cycle span (Months)
Cattle 1	Beefs	250	150	650	16-18
	Cows	50	550	550	
	Hens	500	Chicks	2,5	6-7
Cattle 2	Beefs	80	250	550	8
Sheep	Lambs	1000	6-7	18-20	2
	Fat lambs	*	6-7	50-60	6-8
Poultry 1	Chickens	3000	Chicks	3	4
	Turkeys	400	Chicks	4,5	7
	Guinea fowls	800	Chicks	1,2	4
Poultry 2	Chickens	250	Chicks	2,5	5
Pig	Fattening pigs	150	25	180	10

* Share of the Lambs in relation to their Easter sales.

2.2. The managerial resource

Also in the organic Venetian breeding farms, like in most of the conventional ones of the Region, entrepreneurial and family labor largely prevails on the directly hired labor or on machinery contractors. Family labor is always massively involved in the usual breeding activity, while occasionally the farmer commits other workers in crop cultivation.

In the interviewed entrepreneurs' opinion, the professional ability required in the various activities connected with the organic breeding production process is mostly upper-middle, especially for what concerns health care and pregnancy induction. Slaughtering and carcass processing are always commended to other firms, but the entrepreneur of cattle breeding farm located in the Padua Province has expressed the intention to build a farm slaughterhouse.

Most of the breeding farms have converted methods that they have used for a long time to the organic ones. This implies that the sample entrepreneurs were already well trained in their own business. Breeding is a new activity only for one farm. Professional satisfaction is considered the main incentive for converting to organic production for three farmers out of six, while, in the other cases, conversion appears to be dictated more by idealistic motivations, which also in the field of the organic cultivations has characterized most of the pioneering farms.

In general, we have recorded an extensive professional updating demand from the organic meat operators; it relates above all to technical and legal aspects, but the sources they use appear quite diversified, also within the same firm type.

The contribution supplied by agencies which control and certificate organic production and processing methods is regarded as particular important by many of them (processing operators included), most of all with reference to legal issues.

On the contrary, there is fewer use of trade and marketing information, which is obtained mostly by their customers. Only the non-farm units utilize specialized press to such aim. This situation appears in accordance with the prevailing extra-economic motivations for organic breeding pioneers, which we have previously noticed. Persisting

in time, however, could generate serious problems both for the profitability and the sustainability of the organic meat business, which these enterprises have undertaken.

2.3. Some economic elements

Whereas the total revenues of both the processing enterprises go over 500,000 Euros, the total sale value of all the breeding farms but one is less than 250,000 Euros. Only the cattle breeding farm with the commercial company exceeds 500,000 Euros as sale value.

The dynamics of the revenues in the last three years does not appear to be even. Of the cattle breeding farms, the smaller one, with exclusively wholesales, declares they are substantially stable, while that larger one, which practices direct selling and utilizes other trade channels, shows a high growth in the revenues, particularly noticeable for the linked trading company.

Sheep breeding sales (100,000 Euros) and those referring to the small poultry one (15,000 Euros) are stable too, while those relating to the larger poultry breeding farm show a light increase during the 1998-2000 period and are expected to double in 2001, which is the first year following the end of the conversion phase. On the contrary, the two processing enterprises have both achieved a striking sales increment: one from 1,500,000 Euros in 1999 to 3,500,000 Euros in 2000, the other has begun its activity in 2000 with 300,000 Euros sales, but it will widely exceeds 500,000 Euros in 2001. The pig breeding farm has carried out its first sales only in 2000, with an approximately 20,000 Euros revenue.

Also in a small number of cases, prices show a remarkable variability within the same kind of breeding, in relation to the different sale channels they use.

As for as the meat processors' price, we relate on only one beef firm information. The gross sale price is on average 25% higher than the conventional meat price, with the exception of the organic specialized shops, where the processor obtains an approximately 50% increment for pre-packed meat. The retail price increase in the outlets supplied by the firm ranges from 25% in the GOD sale points to 60-70% in the organic specialized shops, and it is around 35% for consumers in the other channels.

The survey has given also some interesting cost elements. The two cattle breeding farms, the small poultry one and the pig one have reported some values regarding fodder crops. In the two cattle breeding farms (which use exclusively their own manure as fertilizer) cash costs per hectare vary between 150 and 180 Euros for soil mechanical operations and between the 200 and 250 Euros for forage harvesting. But the widest difference is in the weed control cost: from 90 to 250 Euros/ha. The organic pork meat producer shows the highest fertilization cost (200 Euros/ha). Organic crop certification costs range from 10 to 20 Euros/ha.

Cost elements relating to the breeding phase appear to be more interesting. In particular, for one cattle breeding the per head purchase cost is approximately 400 Euros, whereas for the other it reaches 750 Euros, depending on the different breeds. In these farms, feed expenses vary between 1.45 and 1.70 Euros per head per day; health care expenses between 15 and 21 Euros per head; certification cost of organic breeding are 2 Euros per head in both cases. The per head labor need is much higher in the smaller breeding farm, which requires 1.200 hours per year for stable-related works, against a 1.500 hours requirement from the larger dimensions breeding (250 heads in

the fat stock keeping and 50 cows). This difference can be an index of remarkable scale economies also in the organic cattle breeding, and it may also be ascribed to constraints connected to the previous farm structure.

In the poultry breeding farm with 250 chickens, self-replacement cycle and an annual labor need of only 60 hours, direct per head costs are estimated 4,40 Euros, of which 0,50 relate to veterinary care, as many to general expenses and the remaining amount to feeding costs. In the other poultry breeding farm, instead, the annual labor requirement is very different, that is approximately 1.500 hours. Expenses for such breeding are 0,50 Euros for a hen or Guinea-fowl chick purchase and 2,80 Euros for a turkey poult purchase. Feeding expenses are estimated in approximately 5 Euros per broiler and Guinea fowl and 10 Euros per turkey. To these we have to add a little more than 0,50 Euros per head for general expenses, insurance and veterinary care costs.

The sheep breeding farm shows low costs, which are typical of a pasture-based technique. Labor employment for sheepfold management is approximately 700 hours, whereas what is needed for the pig breeding is a little lower (600 hours). In this firm we have found the following direct costs per head: 100 Euros for piglet purchase, 200 Euros for feeding, 2,60 Euros for veterinary care.

The purchase prices of organically produced animals to be fattened or to be slaughtered are determined by practicing a percentage mark up on the price of the same animals obtained in the conventional way or by specific supply contracts in which the purchase price of the animal to be bred is linked to that established for its sale. Only one processor gives the supplier a price, which is connected to the breeding production cost.

As far as the processing and marketing costs, the larger poultry breeder calculates in approximately 3,60 Euros per head (including in such amount also the high

charge needed to deliver small quantities to the multiple retailers); the smaller cattle breeder estimates that slaughtering, stocking and transportation cost are about 0,50 Euros per Kg of meat. The other cattle breeding farm provides more detailed information: slaughtering and transportation costs are 90 Euros per head, while cuts selection, packing, labeling and other logistic expenses are around 2,50 Euros per Kg of meat. This is a higher value than that given by one of the two processing firms, namely 1,7 Euros per Kg, which includes stocking, shipping, marketing and certification costs.

2.4. Supply and market

Organic meat supply varies according to farm dimension. Only the larger cattle breeding delivers a meat quantity which is comparable to the quantities showed by the two processors (Table 3), whose supply appears, however, lower than that of other similar enterprises operating in the conventional meat industry.

Table 3: Organic meat supply

Firm type	Sales (kg of meat)	Marketing channels	Share %
Cattle breeding farm1 (Padua)	10.000 (chicken)	Restaurants	20
	120.000 (beef)	Specialized shops	80
Cattle breeding farm 2 (Verona)	24.000	Direct sales	25
		Wholesalers	75
Sheep breeding farm (Padua)	35.000	Wholesalers	100
Poultry breeding farm 1 (Treviso)	9.000 (chicken)	Direct sales	20
	1.500 (Guinea fowl)	Wholesalers	20
Poultry breeding farm 2 (Padua)	1.800 (turkey)	Specialized shops	60
	750	Direct sales	100
Pig breeding farm (Padua)	27.000	Direct sales	10
		Processors	90
Meat processing 1 (Verona)	60.000 (pork)	GOD	10
	180.000 (beef)	Conventional butcheries	10
	80.000 (poultry)	Specialized shops	30
Meat processing 2 (Venice)	25.000 (mixed meat)	Processors	15
		Catering	30
		Own retail outlets	5
		Wholesalers	25
		GOD	50
		Specialized shops	25

There are two different supplying strategies in the two cattle breeding farms: the first acquires calves twice a year – in spring and autumn – with at least half of the available places always utilized, the other, instead, makes all the purchases in September, and sells gradually the entire production in the spring-summer period. The sheep breeding farm sells all the lambs at Easter time and ends selling the fat lambs in October.

All the operators consider producing exclusively for the Italian market. Among the channels, the organic specialized shop seems lightly to prevail (Table 3), but among breeders also wholesalers have a remarkable importance. Although direct sales can give more rewarding prices, they remain confined to small amounts and only the smaller poultry breeding uses this channel exclusively.

The larger poultry breeding farm delivers wholesalers 75% of turkey meat, while it supplies specialized shops 80% of the chickens and 50% of the Guinea fowls. The commercial company linked to the larger cattle breeding owns a retail outlet in the city of Padua.

The processing firm which is located in the Verona Province is a society supplying wholesalers who has contracted approximately 600 cattle heads during the year 2000, as many pig heads and about 40.000 poultry heads coming from poultry breeding farms (hens, chickens, ducks, geese, turkeys and Guinea fowls). Direct sales are carried out in a small chain of shops, which are managed in franchising. Because of the very little availability of the Veneto organic meat production, this enterprise has been forced to buy goods on either the national or the foreign markets. All the organic pork meat and half of the poultry meat come from Italy, the second half of the latter being imported from France. 80% of organic beef meat comes from the EU market, in

particular from Austria, the other 20% being imported from non-EU countries, especially from Uruguay. The other processor has succeeded in selling on the organic meat market only 20 tons, provided that lower quality cuts are sold on the conventional meat market.

Trade relationships with the GOD regard only the two processing firms. The one based in the Venice province has begun only a year ago to supply supermarkets with organic beef meat, while the other has being established contacts with supermarkets and/or their chains for three years, given that it has initially privileged distribution to the specialized retailers.

Among the factors that have mainly influenced the product mix choice of the various firms, most of the interviewed operators have indicated, after the product price, the production cost as the key element for the choice they have made. Productive risk, mainly linked with product availability, ranks subsequently, particularly for one of the processing firms and for the larger cattle breeding farm, while marketing risk has been the last factor to be taken into account, which means that operators expect a limited prices volatility for their organic meat.

When entrepreneurs have been requested to express their perception on tendencies in the organic meats market they have indicated a growing or stationary trend. Among the breeders, only who directly markets beef meat and the pig breeder have assumed a short-term increment of 40% for organic meat sales, whereas the others think that a stationary path is more likely. In contrast the two processing companies have forecast 10% to 40% sale increases in the short term. Consequently, such enterprises believe that also similar increments of their supply can find easy outlet on the organic meat market.

With reference to organic meat processing, with the exception of the sheep-growing farmer, all the other entrepreneurs declare that it introduces substantial differences with the conventional way in relation with the meat manufacturing, conditioning and storage. Only one processing firm states that there are differences also about conservation, whereas no enterprise thinks that trading methods are different.

Half of the interviewed entrepreneurs believe that there is a market for not certified organic meat, which is mostly directly sold at the farm level; but their estimations diverge widely on its amount. Such market would be due to the high organic certification cost (especially for the small size farms) and to difficulties in fully complying with the organic breeding rules.

2.5. Production technology

The several operations implied in the production of the organic cattle meat are carried out through traditional equipments, structures and modalities, by means of medium-low technological levels. The technological level of the operations in the organic poultry breeding appears to be analogous or a little lower, and is influenced especially by the breeding size. No technological improvement is envisaged in the sheep breeding.

Both rations in the two cattle breeding farms show large use of fiber (hay and corn silage in the smaller one; corn silage, permanent grass hay and dehydrated alfalfa in larger one), but while the latter produces its own concentrate starting from single raw materials (corn, barley and soybean grain and bran), the former prefers to utilize an acquired organic concentrate. Feeding in the poultry breeding takes advantage, besides

in grubbing, in acquired concentrate, which comes also from abroad; pig breeding implies, besides *ad libitum* pasture grass, a daily concentrate amount that ranges from 2 to 4 Kg per head, in relation to the different phases of the production cycle.

As far as investments carried out during the last five years, the sheep breeder and the smaller poultry one declare that they have begun organic breeding activity without any significant investment. The other poultry breeder has totally invested 26,000 Euros in order to undertake organic breeding, by making possible the open stable system, pasturing and buying a truck. The pig breeder has invested around 15,000 Euros in fencings and other simple equipments. The larger cattle breeder has carried out investments for approximately 255,000 Euros, the smaller one for 37,000 Euros million, to make the structural adjustment required by the organic production method. The slaughterhouse planned by the former wills needs and additional investment of 250,000 Euros. The larger processing firm has declared that it has carried out more than 500,000 Euros investment during the last five years, in order to start and go on processing organic meat.

2.6. Marketing strategies

Besides the already noted extra-economic motivations, the reasons of the organic choice are tied substantially to the market demand and the operating margin one hopes to gain by producing organic meat, thanks the premium price the consumer is willing to pay for it. Only non-farming firms put in the assortment enlargement and the new product search as motivations. Hence, they are operators who are going to occupy as pioneers a space which they think that it will widen itself, who are confident in a market

growth analogous to that which has marked the crop organic products in the nineties, who have decided to face the difficulties entailed in the construction of a new market, but who hope to receive some economic satisfactions in the long run.

The fact that only the larger cattle breeding has taken advantage from a marketing plan which was asked from an external advisor is emblematical of a such primitive phase in the building up of the market. This plan, aimed at expanding sales in the home market, implies the use of all the four marketing mix basic levers. In both the processing companies the firm staff plans marketing strategies, with higher use of the marketing levers than the in the breeding farms. Anyhow, marketing activity is mainly focused on the home market expansion.

Each firm claims meat price stability for every type of product during the year. At the wholesale level, organic meat price is influenced mostly by the production cost, the transaction amount and the purchaser's type.

In the operators' opinion, some key factors appear to be the most important for the improvement of sales flow, with reference to each marketing channel. On-farm direct sale, while it generally results in satisfying prices, shows logistic problems (for one cattle breeding and the pig one), but, above all, limited tradable amounts that induce the breeder to divert part of the production towards other less rewarding channels. Within these, wholesale is characterized by prices, which are lower than the expectations and, in some case, by too much delayed payments. Margin is judged to be low also for the beef meat that is sold to catering units. The logistic aspect and the limited tradable amounts appear to be the critical points in supplying specialized shops, to which a price beneath the expectations has to be added in the case of the poultry products. Therefore, also for the marketing channels, we notice problems, which are

typical of a building up niche market, in a situation of a still very little organized supply.

The larger cattle breeding is the only one farm to take advantage, at the same time, of a collective brand, a business brand, organic and environmental certification and several advertising techniques, such as farm visits, a booklet, a web site, and sponsoring different public interest events.

Business brand is used also by the pig breeding farm and by the larger poultry one, while the smaller one does not take advantage in any communication tool, not even in the organic production certification, which is used by all the other companies. The processing firms, which is located in the Verona Province utilizes two trademarks: one for the specialized shops distribution, the other for being acknowledged by the GOD customers; the other, instead, does not adopt its own brand, but takes advantage in a collective brand for organic products which is already famous at the GOD and the wholesale level, but it carries out promotions at the outlets where its meat is available.

Amongst the breeding farms only the cattle one which practices direct retail selling and pig one have taken part to events related to organic food, either at the local or at the regional level: they think of having achieved good or acceptable outcomes regarding the on-farm demand and the brand name. Both the two processing companies, instead, have participated to specialized international promotional events, of which they retain a good, if not optimal, opinion.

The strategies for the improvement of organic meat distribution rely mainly upon putting into practice structural actions within the chain aimed at increasing the supply. Also channels diversification and promotional actions are considered useful in order to make easy the advance of organic meat chain. This implies that operators

perceive the need to increase their bargain power, which currently appears still rather low.

At last, as far as the strategies for supporting the sale levels, only the sheep breeder does not show any proposal in order to further promote own business, seeming to be already satisfied by current situation. On the other side, the strengthening of quality standards and the name associated to the business brand are strategies, to which both the cattle breeding farms and both the processing firms are tending, whereas selling price reduction appears to be a necessity only of the latter. For three breeders, cutting the meat cost of production is important too; other two breeders wish to achieve additional certifications in order to better guarantee their product goodness. The use of a well-known certification brand is a need recognized only by the pig breeder, and only one breeder trusts in a greater development of the direct sale channel.

2.7. Conclusive remarks

Although we need a noticeable caution in drawing conclusions, due to a heterogeneous and numerically very small sample, our survey seems mostly to confirm some features and problems which were referred in the first part of this paper on the Italian situation.

However, at first, we want to underline that the supply side pioneering actors in the organic meat market in Veneto appear rather confident if not optimistic. In fact, with reference to the last decade, we have found a meaningful dynamism in most of the firms on what concerns the breeding size and the organic meat processed quantities (Table 4). This offers a good hope for the keeping on dealing with organic meat in the future: most

of them have declared that they have good or sufficient perspectives, particularly trusting on the soundness of the organic option, which someone sees as the more promising method for tomorrow agriculture; only a poultry breeder envisages limited chances for continuing organic animal production, provided that, facing the difficulties linked to this option, he or she is not fully persuaded on this choice.

The organic meat niche market is now smaller than the organic dairy products market and shows greater difficulties, which are typical of a not well-organized supply, still at an embryonic stage. From the survey's results, it seems to emerge that in exploring this new market there is a group of operators which is heterogeneous in size, attention to the market (especially in what regards the selling solutions: live weight, slaughtered animal or meat cuts), costs of the new processes and, hence, economic results.

Table 4: Business size variation and perspectives (entrepreneurs' answers)

		Firm type				
		Cattle breeding	Poultry breeding	Sheep breeding	Pig breeding	Meat processing
Changes in the business size in the last ten years		2 Yes	Yes/No	Yes-	Yes	2 Yes
Perspectives for keeping on organic meat business:	Limited	-	Yes/No	-	-	-
	Sufficient	Yes/No	Yes/No	-	-	-
	Good	Yes/No	-	Yes	Yes	2 Yes

At the chain level, we have found a certain contractual weakness of the breeding farms in the comparison of the processing enterprises. The traditional wholesale channel shows either logistic problems or a scarce product positive valuation, which are linked also to an insufficient supply concentration at the production level. For such reason, not only the processing firms, but also some breeding farms, have begin to diversify the sale channels.

Direct selling from organic breeding farms, although rewarding, seems to be limited by logistic problems, hardly affordable in the short run, given the high cost of the required investments; moreover it will be very difficult to go beyond the current demand level (local and from aficionados). More promising for the processing industry seems to be the way of the small specialized retail shops as long as it will succeed in containing prices and it supports sales through a proper promotional strategy. It still remains an open question if the GOD could be an outlet channel for organic meat produced in Veneto. By now it must be recognized that in the first Italian region for meat production, the internal supply of organic meat is in fact fairly low and the same processing operators, which supply the GOD, tend to supply themselves outside the region, mainly abroad. More practicable appears selling to some scholastic caterings or restaurants, establishing stable agreements between these operators and the producers/processors of organic meat.

Among the surveyed enterprises, some of them (processing firms and some breeding farms) appear more engaged on marketing, aiming at the strengthening of the image which is associated to their brand among the consumers and at the development of other marketing tools, trying moreover to adapt their supply, not only about quantities, but also about aspects which are related to meat quality, logistic and distribution. Others, instead, in particular some breeding farms, seem to pay more attention to obtain satisfactory economic result by control of production costs.

By either considering what has emerged from the survey or relying on the opinion of qualified experts, it appears that some regulation aspects make the conversion to organic techniques very hard for almost all the operators in the conventional Venetian breeding farms.

A first difficulty regards the ban to raise the same species with organic and conventional method, the aim of which is to avoid management mistakes inside the same farm. In effect, many operators would want to begin conversion gradually, but, facing a radical choice, they are not ready to involve the whole breeding, especially if its size is quite wide. An organic cattle breeding also implies to cultivate organically the farm arable lands. There must be a connection between animals and cultivated surface: at least 35% of the ration must be produced by the same farm or by other local farms to which the breeder is linked also for manure disposal. However, a single crop system based on corn is very common in the Venetian conventional livestock farms, provided that it is the way to obtain the highest number of feed units per hectare at the lowest cost. By the contrary, organic agriculture implies to rotate corn with other species, among which there are some pulses. As an example, if we considered the rotation corn-barley-soybean, useful for weed control and for fertility conservation, we cannot forget that it gives a significant lower number of feed units. Similarly we should not forget that weed control in arable land could only partially be attained by mechanical interventions, since we cannot use chemicals in organic agriculture. All this determines a 20-30% decrease in the feedstuff production, which can be translated in a 40-50% production costs increase in the organic cattle breeding, but this increment can also reach 200% percentage in the organic poultry one, given that it has cycles of production which are at least double (sometime also triple) in length, if compared with the conventional one.

Generally, we can assert that as more intensive is the conventional breeding to be converted, as more significant is the cost difference between the conventional and the organic breeding. This is confirmed also by the breeding farms that we have surveyed.

In fact, the survey sheep breeding originates from a reality, which were already very close to what is required by the organic livestock breeding. It was classifiable like an extensive breeding that uses marginal areas (banks of rivers, high-water beds, mountain meadows), which does not need important off-farm inputs (concentrates, integrators, drugs) and technologically advanced structures; therefore production costs are substantially analogous in the two breeding systems, because the only additional cost regards organic certification, which is widely compensated by the financial aid granted by the regional RDP.

On the other side, for the two organic cattle breeding farms, we can estimate a 40-50% production cost increment, with the highest value in the larger one, because it has opted for livestock belonging to particularly expensive races. And the pig breeding farm too shows similar cost increments.

Finally, in the two organic poultry breeding farms, cost variations are still more remarkable, in particular for broilers, whose production cycles, ranging from 100 to 120 days, are much longer than in the conventional breeding. For this reason there is greater concentrate consumption and higher labor need, given that very simplified structures, although having medium depreciation costs, force breeder to manually execute a series of operations, which in the conventional sheds are fully mechanized.

Another important aspect for cattle breeding regards stocking. Its maximum level is conditioned by the 170 kg of nitrogen per hectare constrain, which implies from 5 to 3,3 bovine heads per hectare in relation to their weight. These stockings are surely below those we can find in most of the Venetian flatland breeding farms, which have small surfaces and so raise a higher number of heads than what organic production regulation allows. Therefore if the breeder wants to put into effect the conversion to

organic breeding, he or she would be forced or to reduce the number of heads with the same surface or to increase the available surface, a fact not simple to be carried out in the current Veneto land market context.

The supply of organically reared young animals is another crucial point. At present, it is practically impossible to find calves that are certified as produced by an organic breeding farm. Moreover if you add that the organic breeder needs to rear animals in a open stall system, based on structures with full paving (namely without grated floor), and offering a pasturing possibility, anybody who knows the reality of Venetian livestock breeding activity, can understand that the conversion from conventional breeding is not easy to undertake.

In conclusion, rearing animals in compliance with the principles of the organic animal breeding implies higher costs for decrease in crop yields, higher per head fixed costs, as well as higher feeding costs, if one needs to buy on the organic feed market; whereas consumers are willing to pay for organic meat only 25-30% more than for the conventional one. A reasonable acknowledgment of the entrepreneurial choice carried out by organic meat producers should lie in a at least 40-50% premium price for beef meat and a 150-200% premium for poultry meat, which would result in a price that only few consumers would be willing to pay.

It is clear that so high cost variations prevent the conversion to organic meat production also for operators who would be well disposed to it, but are hesitating in front of a market, which, at present, is not able to guarantee, except for some small outlet channels, a sufficiently boosting premium price. In this scenario, we think that a species-related subsidy calibrated on the per head cost of production increment which depend on the conversion to the organic breeding, should integrate the general per

hectare aid provided by the Veneto Region RDP in favor of organic crop cultivation, as a support tool which is more effective and more targeted towards organic breeding.

Previous comments contribute somewhat to explain also why the Venetian organic meat processors have to import meat from other EU countries, where production costs are lower. In fact, in these other realities, though they are difficult and marginal for agriculture, organic breeding costs are only about 20% higher than those related to conventional breeding. Nevertheless, they are unquestionably lower than those we can find in conventional breeding farms of Veneto flatland. Hence, these operators are able to acquire organic certified meat with a 20-25% premium price over the conventional one.

Organic meat market at the regional level is still a reality to be defined, which is now moving the first steps: organic meat is actually present in four specialized butcheries (one in Verona, two in Padua, one in Rovigo), it is found in the organic specialized shops (about thirty), and it begins to come out in some conventional butcheries and in the GOD outlets. Although, interest seems to increase, given the expectations of consumers who are looking at these products as remedy against recent food scandals fears, organic meat consumption ranges between 1,5 and 2% of total meat retail value, while gross sales can be approximately estimated to reach 10 millions of Euros, i.e. a rather low value, peculiar to an industry that is still at an embryonic level, and in which price is the key factor that more limits consumption. This is, indeed, a problem, which still regards the whole organic food industry, although price reductions have taken place during the last two years, following the increasing GOD interest in it. Nevertheless, difficulties are surely greater for organic meat, given that, from one side,

it is more difficult to reduce costs and, from the other, we have not to forget that meat has a broad share in the expenditure for conventional food.

Now, after three years, the firms which first began to operate in the organic meat industry begin to see the first results, whereas the others are keeping on investing and consider themselves still in the launching phase. So, although the BSE crisis and the EU industry new regulation, much remains still to build, either at production level (breeding technologies, *ad hoc* structures, chain integrations, identification of the most suitable places) or at the market level (promotional campaigns and consumer's information).

At the end of this first analysis of Venetian pioneering firms in the organic meat industry, we want to stress that further research is needed, especially about technical and economic feasibility of breeding kinds which can be suitable for the Venetian agriculture conditions, with special attention for some zones (mountain, park areas), which may find in the organic breeding the proper balance between production and environment safeguard.

In spite of current difficulties, the survey has shown interesting elements that could considerably modify the industry outlook in the future. They regard the possibilities that the feedlot based cattle breeding, which is the prevalent meat production system in Veneto, can get a solution to problems as the stocking, the organic calves supplying, the feeding cost reduction and the market-related ones. The first researches undertaken in this fields show that there should be the possibility to control breeding costs within a 20-25% increase in relation to the conventional meat, with a reliable market perspective of achieving a 30-50% organic meat premium price and anyhow of a strong fidelity from the Italian consumer.

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