

Educational farms in the Emilia-Romagna region: their role in food habit education

Maurizio Canavari^a
Carrie Huffaker^a
Rossana Mari^b
Domenico Regazzi^a
Roberta Spadoni^a

^a Alma Mater Studiorum – University of Bologna
Department of Agricultural Economics and Engineering (DEIAgra)
{[maurizio.canavari](mailto:maurizio.canavari@unibo.it), [domenico.regazzi](mailto:domenico.regazzi@unibo.it), [roberta.spadoni](mailto:roberta.spadoni@unibo.it)}@unibo.it

^b Italian Region of Emilia-Romagna – Production valorization
rmari@regione.emilia-romagna.it

Abstract

Educational farms are farms which offer educational tours to visitors so that they can learn about specific information concerning agriculture, the environment and nutrition. These enterprises are involved in activities which complement their main work. This can bring benefits, including economic ones, to them as entrepreneurs, as well as having important social value. The objective of this paper is to present an authentic local example of this: the Italian Emilia-Romagna region, where Educational farms are particularly widespread and supported by the public administration. In particular, it highlights the role played by the educational farms regarding food habits and discusses the relationship between the enterprise's educational function and business strategies. This analysis is an attempt to view the above from a marketing point of view, highlighting its features and reporting on potential factors regarding improvement and development strategies. After a brief description of the general situation, we present data available from regional sources as well as from surveys conducted by private entities and by DEIAgra. The educational farms' role in regional education policies regarding food consumption will be highlighted. Finally, we offer some considerations concerning possible analysis in accordance with the framework of the marketing concept.

Zusammenfassung

Schulbauernhöfe sind Bauernhöfe, die Führungen für Besucher anbieten, um ihnen bestimmte Informationen über Landwirtschaft, Umwelt, und Ernährung näherzubringen. Diese Betriebe bieten ihren Besuchern Aktivitäten an, die die Kernaufgaben des Betriebs ergänzen. Dies bietet den Betrieben zum einen ökonomische Vorteile, zum anderen wird ein erheblicher sozialer Wert geschaffen. Ziel dieses Beitrags ist es, ein authentisches lokales Beispiel solcher Aktivitäten darzustellen: die italienische Emilia-Romagna Region, wo Schulbauernhöfe besonders weit verbreitet sind und von der öffentlichen Verwaltung unterstützt werden. Insbesondere wird die Rolle der Schulbauernhöfe bezüglich der Essgewohnheiten

hervorgehoben und die Beziehung zwischen der pädagogischen Funktion und der Geschäftsstrategie des Unternehmens diskutiert. Diese Analyse versucht, die oben aufgeführte Situation aus einer Marketing-Perspektive zu betrachten. Sie zeigt ihre Charakteristika auf und berichtet über mögliche Faktoren für Verbesserungs- und Entwicklungsstrategien, die beachtet werden sollten. Nach einer kurzen Beschreibung der generellen Situation werden Daten aus regionalen Quellen präsentiert, sowie von Befragungen durch privaten Institutionen und durch DEIAgra. Die Rolle der Schulbauernhöfe in der regionalen Erziehungspolitik bezüglich des Lebensmittelkonsums steht in dieser Arbeit im Fokus. Zum Schluss werden einige Überlegungen bezüglich möglicher Marketingstrategien formuliert.

Riassunto

Le fattorie didattiche sono aziende agricole che offrono agli ospiti percorsi didattici allo scopo di far conoscere aspetti specifici legati all'impresa agricola, all'ambiente e all'alimentazione. Tali imprese svolgono attività complementari a quella principale, che possono apportare vantaggi, anche di tipo economico, all'imprenditore, ma che assumono una valenza sociale importante. Obiettivo di questo lavoro è quello di presentare una realtà territoriale italiana, cioè la regione Emilia-Romagna, dove le fattorie didattiche sono particolarmente diffuse e supportate dall'ente pubblico. In particolare, evidenzieremo il ruolo svolto da tali fattorie nell'educazione alimentare e discuteremo del rapporto esistente tra la funzione educativa e le strategie imprenditoriali dell'azienda. L'analisi vuole rappresentare un tentativo di leggere questa realtà in un'ottica di marketing, evidenziandone le caratteristiche e mostrando quali possono essere i fattori da considerare nelle possibili strategie di miglioramento e sviluppo. Dopo una breve descrizione del contesto di riferimento, si presenteranno i dati disponibili, provenienti da fonti regionali, da indagini svolte da enti privati e dal DEIAgra ed elaborati direttamente. Verrà evidenziato il ruolo delle fattorie didattiche nelle politiche regionali di educazione ai consumi alimentari. In conclusione si riporteranno alcune considerazioni relative ad una possibile analisi secondo le componenti del marketing concept.

Keywords: Educational farms; Multi-functionality; Nutrition education; Marketing concept.

1 Introduction

Educational farms are farms which receive visitors for educational purposes, where they learn one or more specific aspects of its business operations, about the rural and natural environment around the farm and about issues regarding food, culture and the rural tradition. This is one of the possible choices that farmers have when moving away from the single idea of agricultural production (the economic perspective) and adopting an innovative way to "cope with the negative aspects of productivity, or the agro-industrial paradigm [the sociological perspective]" (Henke and Salvioni, 2008). The farm enterprise adopts multi-functionality (OECD, 2001), and offers, in addition to supplying products, a number of other benefits and environmental services such as management of the landscape, the land itself, biodiversity, as well as social benefits such as the maintenance of rural societies, traditions, the safety and wholesomeness of food (Gaudio and Trunzo, 2009). Multi-functionality can be interpreted in various ways: a strategy for increasing the autonomy of businesses and the profitability of their resources, a way to combine income from agricultural production with that from environmental and social functions and a system leading to the involvement of the environment of which the farm business is part, as well as promoting sustainable development (Marsden and Sonnino, 2008).

In Italy, the multi-functional role of agriculture has been recognized in legislation with the enactment of Legislative Decree No. 228 of May 18, 2001 in implementation of the so-called "Orientation Law". It provides a new legal and functional form to agricultural enterprises, expanding the range of activities which can be defined as agricultural (Salghetti, Ferri, and Manghi, 2007). The farm enterprise, while remaining anchored to the agricultural sector, may perform activities which encroach on the industrial and service sectors, delivering services to individuals and society at large, and the occupation of farming is transformed by combining the functions of entrepreneur, farmer and rural technician and animator. The activities included in the concept of multi-functionality make the farm take on a different role regarding the market, and the strategies already, or still to be, adopted may be successfully reported and analyzed with a view to marketing.

To proceed with this approach it is necessary to try to define which activities may be attributed to multi-functionality in farming. Van der Ploeg and Roep (2003) make one of the first attempts to classify the activities which fall within the concept of multi-functionality. They report three categories of activity: deepening (broaden and enhancement of agricultural production), broadening (enlargement of the productive activities undertaken by farmers) and re-grounding (reallocation of production factors outside the farm) (Henke and Salvioni, 2008). The activities which take place on educational farms may be categorized as 'broadening'. In this case, in addition to its direct source of income, farmers see in educational farms an opportunity to promote the enterprise and its products (e.g., direct selling) or to provide motivation to young people and women not to abandon the countryside (Nasolini, 2005). In fact it stimulates the creation of new skills, enabling the development of cultural and educational attitudes in the group running the enterprise. The main activity is education, which is distinct from other activities falling under the name of multi-functionality because of its direct influence on human resources and its 'jointness' regarding not only technical aspects but mainly tied to the institutional behaviour of the farmer (Ohe, 2009). Educational farms, especially in their relationship with schools, have become an important tool for projects involving the environment, bringing together a system of values and educational disciplines (knowledge and skills) (Bertacci, 2005). There are various subjects which may become educational activities and often their choice depends not only on business and regional characteristics, but also on the guidelines dictated by public bodies operating in area. Emilia-Romagna has strongly promoted education regarding food consumption and knowledge about food (provenance, ownership and profiles). This approach is consistent with what is happening worldwide, and assumes major significance in this age where lack of information and bad eating and physical activity habits, are resulting in high costs to society. Diseases such as obesity cause 1 million deaths and 12 million cases of illness in Europe, generating high public costs; indeed, in some European countries the cost for treating obesity has reached as much as 1% of gross domestic product and accounts for 6% of direct health expenditure. In Italy, the phenomenon is growing ever faster and an average of 4% of children and adolescents are obese, while over 20% are overweight (Branca et al., 2007). In industrialized countries, governments have launched campaigns to raise public awareness,

promoting healthy eating habits and tools for educating especially the younger generation in food awareness. It is precisely the younger generations which are most affected by their distance from agricultural reality, resulting in important gaps in their knowledge which affect their choices regarding food. The European Council of Young Farmers (CEJA) carried out a survey among children in Europe in the age group between six and eleven which revealed that children have mistaken factual beliefs about the food they consume (retrieved October 10, 2009, from www.ceja.org). They are influenced by advertising and their lack of food-related experience into having difficulty in associating original products with their final form after processing. For example, 50% of European children do not know where sugar comes from; three quarters do not know where cotton comes from, a quarter believing that it grows on sheep. A third of children are not able to quote even a single product derived from sunflowers. Most children come into contact with agricultural products only in the supermarket, with only 10% citing the farm as a regular source of supply for the family (of course these percentages vary in different countries according to the particular characteristics of their environment). Nearly a quarter of children are not able to cite a method of food preservation other than freezing. When asked which animals produce milk, all children mentioned cows. Strong differences appear, however, when children are asked what products can be obtained from milk. Cheese is the most cited, by three out of four children. Over half the children mentioned butter and yogurt and four out of ten cream. Other products (whipped cream, cheese curds, ice cream) are cited less frequently (Holst, 1999).

Against this background, we have tried in this paper to highlight the relationship on educational farms between food education (including correct food consumption) and the development strategies of the enterprise itself. The study proposes firstly to focus attention on how, in fact, educational activities integrate with those of the 'traditional' enterprise, using an approach based on the marketing concept. We believe that this approach is useful for analyzing the relationship between their prospects for business diversification and their educational activities, up to now little explored in the literature (Ohe, 2009). Emilia-Romagna, which happens to be one of the Italian regions most active in promoting these issues, was taken as a reference point. Below we briefly describe the characteristics of educational farms and their evolution, and some data will be given on current national and regional situations (focus on Emilia-Romagna). It will highlight the role played by the educational farms in consumer education projects developed in the Emilia-Romagna region, concluding with some considerations regarding the system of educational farms with regard to the marketing concept.

2 Educational farms

Educational farms have existed in Italy for less than 15 years but have, however, been around a lot longer in other countries. The precursors in this field were the Scandinavian countries: Norway, Denmark and Sweden put into practice in the early 1900s the ideas of an American movement, the 4H Club (Head, Health, Heart, Hand), which described its aims as the harmonious development of the individual and the

concept of 'learning by doing'. Thus 'animation' or 'city farms' were established: Farms located in urban or suburban areas and established with the aim of bringing together children, teenagers and adults in the city with farm animals, soil and wild and cultivated plants. They were usually set up on land and in buildings owned or operated by community leaders and volunteers from non-profit associations. From these three countries it then spread to other nations: in Germany after World War II, in the Netherlands, where they are also sustained by public and private bodies, in the United Kingdom where 'city farms' and 'community gardens' carry on a wide range of activities such as training courses, visits by school groups, horse-riding and vegetable-garden therapies, composting and recycling of waste, leisure activities and sports, summer camps, after-school clubs, etc. Similar activities have also been recorded in Flemish and French-speaking Belgium. In France, they are specially supported by a public state body. In Spain, the legislation which regulates the activity does not allow the farmer to be directly involved in teaching, requiring the support of community leaders and experts who are graduates in educational sciences (ALIMOS, 2009).

The first Italian Educational farms were set up in the late 1990s, and have grown steadily since 2000. In the same period, besides the Cesena Agri/environmental Observatory network also the Mantova Agritourism Consortium and the Piedmont Agri-tourism Consortium kicked off, soon followed by Emilia-Romagna, which in 1999 promoted networks of educational farms in all its provinces.

The regional 'educational farms project' evolved from the 'open farms project'¹, the only one of its kind in Italy, both regarding the territory it covered (the entire region) and regarding the synergy created between public and private institutions (Mari, 2009). The main purpose was to promote among children and young people a culture of food, understood as the connection between nutrition issues and their relationship with the land and local tradition. Educational farms are in fact defined as "agricultural enterprises and associations which, in addition to carrying out traditional agricultural activities, including educational activities targeted at various age-groups of schoolchildren and other types of users, are aimed at:

- (a) developing knowledge of the countryside, agriculture and its products and in general the link between diet and cultural and historical heritage;
- (b) educating consumers through an understanding of the relationship between production, food consumption and the environment with sustainable development as an end view;
- (c) spreading knowledge of the biological cycles of plants and animals and the production, processing and preservation processes of local agricultural

¹ As for "open farms", this initiative has been organized since 1999 and in recent years annually more than 200 agricultural enterprises have joined and over 60,000 visits registered in the opening two days (ten times the attendance recorded in the first year of the initiative). Over 50% of participating enterprises are also educational farms. Here, programs to discover the cultural sights of the area, trekking and cycling have been organized and offered to the public, as well as visits to the farms.

products in relation to agricultural activities conducted on the farm.” (Regional law No. 4 of March 31, 2009).

Educational farms can offer services to a wide variety of target groups (schools of all grades, groups with special needs, families, individuals, etc.) through, for example, therapeutic activities aimed at disabled and elderly people (e.g., pet-therapy), offering cultural and scientific programs to attract users from higher educational levels and offering courses of all kinds (e.g., cooking, processing and decoration of clay, etc.). Besides offering these activities there might be the direct sale of farm produce, which is developing in new ways: opening a store in the country or the nearest city to allow customers greater convenience when buying, taking part in fairs and local markets to sell and promote both the products and the enterprise, selling via Internet, and promoting initiatives like ‘pick your own’, a form of direct marketing in which consumers/customers pick fruit and vegetables themselves. Finally, educational farms can join in with other initiatives such as oeno-gastronomical routes, i.e., itineraries with high tourist potential, characterized by high quality local products which are placed in a setting of scenic, historical and artistic activities and which enhance the image of the company.

A new regional law (No. 4/2009) lays down rules on training (consistent with types of production and closely linked to the orientation of food consumption), procedures for enrolment in the provincial list of approved enterprises and enterprise set up declarations, structural requirements, sanctions, monitoring activities and training. A pivotal element of the project is the training of the enterprise manager which confirms the obligation, both at the time of becoming a member and in successive years to continue training (Mari, 2007). In this training process, great emphasis is given to innovative methods of education, in particular food education. It should be noted that while in the early days of the project activities were initiated as a support for schools, there has been a great increase in the tendency for other users to come to the educational farm to get to know, buy and try traditional products, local specialties as well as to experience the local rural culture, and so on.

2.1 Some national and regional data

Data on educational farms are still fragmentary at the provincial level and the only attempt to organize them was the census carried out by ALIMOS in 2009. Based on this source and integrating it with investigations carried out directly, it appears that there are 1,878 authorized educational farms throughout Italy. They were 258 in 2000 and less than one third of the current number in 2005. The regions with the highest concentration of educational farms are Emilia-Romagna and Campania, with 330 and 245 enterprises respectively. The importance of these enterprises in the total national agricultural and regional picture is extremely limited (only one per thousand, about the same in all the different regions), but if one compares the data regarding agritourism enterprises it is clear that in some cases individual regions differ. Regions strongly linked to agritourism, such as Trentino, Tuscany and Umbria are not the same with regard to educational farms. Furthermore, it is notable that on average, the ratio between teaching and tourist farms is about one to ten, while in some regions it

is about one to three, as it is for example in Emilia-Romagna, Campania and Piedmont. Of course, one should remember that often the educational farms are also tourist farms, even without this connection being required.

Concerning the situation in the Emilia-Romagna region, information is derived from manifold sources:

- an analysis carried out directly on data reported in the 'Guide to Educational Farms in Emilia-Romagna' (RER, 2007);
- ALIMOS data of October, 2009;
- a study performed on behalf of the Emilia-Romagna Regional Government by the former Business Research Centre (now Dinamica) in collaboration with the former Cesena agro-food Centre (now ALIMOS). The survey addresses the quality plan of educational farms, trying to identify the needs of the farm operators running such enterprises in order to improve their services. It is based on telephone interviews with all the companies in Emilia-Romagna which adhere to the 'quality charter'² and are thus part of the regional circuit. Furthermore, a group of 247 companies distributed over nine provinces were interviewed directly (Cavazzuti and Macario, 2005);
- a study performed on behalf of the Emilia-Romagna Regional Government by the former Business Research Centre (now Dinamica) in collaboration with the former Agro-environment Observatory (now ALIMOS). The survey aimed at assessing the level of application of the requirements contained in the 'quality charter' and was conducted directly by the provincial food education authorities. The data were then processed at regional level, which was carried out by the Agro-environmental Observatory (years 2003-2004).

Despite not having all the data for past years, it is considered that the course charted by these sources is also valid for the current situation.

Since the beginning of the year 2000 the number of educational farms accredited by the regional government has increased steadily (except in the years 2007 and 2008) to reach the current number of 330. These enterprises are more concentrated in the provinces of Bologna and Modena (together representing over 38% of the regional total), followed by Reggio Emilia and Piacenza (each with about 11%) and their location is fairly evenly shared out between the plains and the hilly areas, while there are few in the mountain areas. The size of the enterprises varies widely, from 3 hectares up to 500 and above, with a large number being concentrated between 10 and 50 hectares (bigger than the 'regular' farms). Regarding the type of production, about 44% of the surveyed enterprises said that they used organic production methods and 27% dealt with products protected by Geographical Indication Labels (this was only 7% in early 2000).

² The "quality charter" is a tool which was thought of before the adoption of the more recent legislation on educational farms and had become a point of reference for formal approval and control by the public administration as well as a way to ensure quality services adequate to the aims of the project. It contained the basic requirements for submitting an application, the production characteristics of the company, the training requirements for farmers and finally the facilities and skills needed to ensure high education and safety standards.

Almost all enterprises have a classroom, a prerequisite for conducting business even in bad weather. Another important feature is the presence of marked-off safe areas for play and picnics; this is found in about 95% of cases. The number of people employed on the teaching side in the enterprises varies from 1 to 3; amongst those who work in the enterprise employed in teaching there is a spouse or partner in 30% of cases, another family co-worker in 27% , employees in 8%, employees with a professional contract 5% and professional teachers (for schools) 4%.

The person in charge of teaching appears to be predominantly a woman (over 50% of cases, with the highest percentage in the provinces of Bologna, Piacenza, Parma and Modena), while the entrepreneur is a man (62% including cooperatives and personal enterprises). These entrepreneurs have passed a basic training on educational farms and nearly half have attended an advanced training.

Regarding the initial motivation that prompted the contractor to begin this activity, ethical values (culture, environment, education about nutrition) were indicated by 86% of respondents, indicating a fairly universal agreement of farm operators to convey to the younger generations traditions, knowledge and tastes of the agricultural world. This was followed by increase of farm income (38%), keeping up with the times (21%), employment for family members (15%) whereas 29% of respondents gave other reasons, such as the promotion of already existing activities (e.g., rural tourism).

Almost all farm operators run other multi-functional services alongside their educational activities: 60% are involved in direct sales of agricultural products, although with considerable differences among the various provinces (this figure was about 75% in the early 2000s). The agricultural products mainly sold are fresh and processed fruits and vegetables, wine, balsamic vinegar, olive oil, cheese, meat and sausages, honey, propolis, royal jelly, liquors, cereals and medicinal plants. Furthermore, more than half participate in the "open farm" scheme and about 50% are tourist farms. Among the latter, the majority offers restaurant and overnight stay facilities. Finally, 30% are part of oeno-gastronomical itineraries.

Besides the increasing number of enterprises participating in the project there has also been an increase in the average number of groups per year visiting the farm, which in 2007/2008 was approximately 20 (ALIMOS, 2009). The total number of visitors has risen from less than 70,000 in the years 2002/2003 to the current 122,500.

For the same year (i.e., 2007/2008), the predominant type of user continued to be schools, ranging from nurseries to high schools (with a notable prevalence of primary schools), which over the last two years have hovered around 80%. This figure has changed significantly since the first survey (2003/2004) when it was 93%, since only 6% of visits were made by adults and other groups (ALIMOS, 2009). The visits take place mainly during the months of April and May (three quarters of the total) and the duration of the visit in over 50% of cases is half a day. The periods of being open to the public are not necessarily continuous throughout the year; sometimes they coincide with school terms, while in other cases they are open only in the spring and autumn months. The number of visitors accommodated per day varies greatly (from

10 to 80) and depends primarily on the number of people on the farm who devote themselves to teaching.

Regarding the educational programs which are run on the farm, almost all propose a guided tour. About 80% of the activities involve either the farm building or the farm animals (sometimes singly, sometimes in herds, while some do pet-therapy). Environmental protection is crucial and is offered in programs such as organic farming, composting and biodynamic agriculture. Also widespread is plant recognition which can be done for medicinal and aromatic herbs, fruits of ancient times, flowers, wild berries, etc. Play activities are offered, especially for younger children, as are theatre and tales of myths and legends. Also veritable museums of tools related to traditional crafts are set up. Activities which may be related to education about nutrition are provided in 85% of cases, such as 'From farm to table' or workshops regarding food. The courses are mainly about the production of bread, milk and cheese, meat, wine, oil, honey, canned fruit and vegetables. It should be noted that in the provinces of Bologna, Piacenza and Rimini these programs are less common (around 70% of the provincial total).

With regard to prices, however, there is some variability both between the various provinces and within the provinces themselves, except for some provinces (Parma, Reggio and Forlì-Cesena), where the price is standardized. The average cost ranges from a minimum of 4-5 Euros to a maximum of 8-9 Euros per visitor (the lowest and highest are 1 and 12 Euros respectively); the variability depends on the duration and type of course. In addition some companies, if not already included in the agreed cost, also offer snacks and lunches to buy (from 3 to 20 Euros).

The program must be prepared together with the teachers and the material provided can vary considerably; it may be produced by the farm itself or it may be prepared by the regional administration or by specific bodies. An evaluation sheet is provided for teachers to compile about the experience on the farm. This is an important and useful tool, primarily for farmers in order to continually improve the services they actually provide, and this form should always be provided as required by the 'Quality Charter'. This rule, however, is often not respected and the number of forms completed is small compared to the number of visits actually made.

As an example, we list below some of the information obtained from the analysis of these forms in the province of Bologna (50 sheets completed by teachers during the school year 2004-2005 with thirteen farms involved).

The most requested educational programs were:

1. from wheat to bread
2. getting to know farm animals
3. milk production
4. discovering the surrounding environment
5. "the 5 senses" program

6. education about nutrition
7. traditions and memories of the past

Whatever the activity on the farm, all visits are covered by a specific educational project which will be further developed in class and is directly or indirectly related to nutrition. The assessments made by teachers on a satisfaction scale ranging from (1) 'not good at all' to (5) 'very good' highlight the high level of coordination with the farmer in defining the program and the satisfaction of expectations (scored 'very good' by 76% of teachers). Assessment of the available tools and of the farmer's skills were particularly positive in most cases, as were assessments regarding the usefulness of the activities carried out, which provided insights to be further developed at school. Both the level of understanding of the proposed issues and the students' participation scored positively as well. The overall scores given to the overall experience at the educational farm were listed as follows: 79% gave 5 points, 13% gave 4, 6% gave 3 and 2% gave 2. Most were considering repeating the experience.

Among suggestions for improving the educational activities the following were cited the most:

- the creation of more informational material
- the organization of more 'hands on' activities for the children
- diversification of the types of activities proposed and, in some cases, better organization
- more accuracy in the presentation of the parts of the farm involved in the visit
- lower prices

2.2 The link with consumer orientation and the role of women

Initiatives in both the public and private sectors designed to steer consumers toward healthier behaviour are many and varied. The value of proper eating habits accompanied by adequate physical activity in the prevention of many diseases is now widely recognized (Ministry of Health and Social Policy, 2009 Program). The cornerstone of the success of these initiatives is how information and all forms of consumer education are disseminated. The importance of these activities is evident when one considers that recent studies have shown that obesity, which is more common in the poorer strata of society, is due not only to economic difficulties, but also and especially to the lack of a cultural environment which places value on, and uses its energies for, transmitting certain beliefs (Wills et al., 2008). This educational role must be played also by the school, a place where kids can develop and learn.

The Emilia-Romagna regional administration has for some time been promoting education on nutrition, creating projects and initiatives in schools in collaboration with the provincial administrations. Education about nutrition in Emilia-Romagna has moved away over the years from the concept of prevention and health protection, concentrating more on the concept of welfare and the development of agriculture as the primary source of food, culminating in 2002 in a specific regional law which

brings together production, nutrition, environment and health. Law No 29 of November 4, 2002³ draws up a framework of objectives and priorities within which all parties involved are called upon to take action, taking into account the many and positive experiences gathered over these years and fed by the conviction that starting from nutrition itself we can promote a better quality of life and health. More specific objectives, activities to implement and methods of assessment are defined in the “Program for consumer orientation and education about nutrition” renewed for three-year periods. The projects in this field are about getting across the right information regarding the relationship between agriculture and the environment, between diet and health, promoting the dissemination of historical, cultural and anthropological information related to food production and the lands of its origin and also working for behavioural change as well as promoting a real change in the nutrition of young consumers and their families.

Article 2 makes explicit reference to the role that the food-producing farms might have “in promoting food education programs [...] designed to develop [...] educational and informational activities”. We must reiterate that educational programs focussing on nutrition are not an option or a potential activity but a constraint that the regional administration places on the educational farms that want to stay in the network. This aspect is specific to Emilia-Romagna, which in fact involves Educational farms in numerous food education initiatives (see [Table 1](#)). These are multi-year projects, involving different protagonists and with clear objectives. In a retrospective analysis of projects already carried out, the importance of initiatives emerged which require close cooperation between different protagonists (region, school, province, training and coordination institutions). This cooperation, however, is conditioned by a lack of dialogue, a lack of a common vision and inadequate organization considering the complexity of the situation. A clear and shared methodology was judged very positively by all parties involved in the projects. Educational farm managers in particular have stressed that such initiatives, seen as being very positive, consolidate relationships with other participants and that it is important to be able to operate even outside their own area. In this way the educational role of the farms is enhanced. There are complaints, however, about the sporadic nature of the initiatives, with no continuity in planning and lack of involvement of students’ families.

³ Law No 29 of November 4, 2002: “Rules for guidance on food consumption and education and assessment of catering services”.

Table 1 Educational farms: rde in food education initiatives

Label of the initiative	Period	Objective	Eating occasion	Targets	Activity type in the E.F.	No. of E.F.	Programs/ occasions/visits	Comment
Eating together	2002-2005	Consumer education	Breakfast, snacks, fast-food	Nurseries, primary, middle and high schools as well as parents and teachers	Site of visits, involvement in the creation of recipes	22	85 programs	The farm visit was appreciated mainly because it was part of a defined program
Tasty snacks	2004-2005	Consumer education, reviving flavours and ways of tasting	Snacks between meals	Primary and middle school	Food supply and traditional recipes	45	934 occasions (snacks)	The importance of trying new foods (different from industrial products)
Tutti frutti 5 portions, 5 colours	2005-2007	Encouraging consumption and knowledge about fruit. Choosing food wisely	Snacks	Primary school	Guided visits. Interactive workshops and suppliers of raw materials (discovery and appreciation of traditional products).	-	9000 children involved	Production of educational material changing eating habits; information from a questionnaire
The kitchen garden at school – Let's plant good food	2006-2008	Environmental education tied in with food education	-	Nurseries, primary, middle and high schools	Training by E.F. managers	14	109 schools	The importance of "learning by doing", focus on the local area

The commitment of the regional administration regarding food education was confirmed by the merging of the Directorate General for Agriculture and the Directorate General for Health, which took place in 2008. In particular, while implementing the regional plan for preventive measures at the Health Directorate, a working group was set up on 'Control and prevention of obesity', which involved also staff from the Directorate for Agriculture, with the aim of coordinating efforts for promoting the adoption of healthy lifestyles by the population. This collaboration was reflected in the drafting of "Regional Guidelines for school meals" and the identifying of common goals between agriculture and health authorities for activities regarding education about nutrition. The investigations conducted showed the role played by women in places like educational farms, open farms and tourist farms. "Current experiences indicate that women, starting out from their age-old, traditional roles, show themselves able to transmit and adapt to today's world the values of an agricultural culture developed over millennia, and to project them into the future" (Ballarini, 2004).

The original idea, meaning the initial impetus to get involved in educational farms, comes from diverse origins: some farmers created a real project, others got involved for the simple pleasure of doing so. Nine out of ten farmers would not exchange their job in the country for a steady job in town. Being involved in an educational farm, for a woman, offers great job satisfaction, but it is not in itself a substantial source of income. To compensate for this, it does make it easier to conciliate leisure time and working time; enabling women to choose their own timetable, to keep up to date with things and to use the computer and networks.

There are outstanding examples of multi-functional farms managed by women and there are cases of significant generational changes involving the children of farmers. These are often the bearers of skills, study qualifications and experience, also gained in other areas, who are capable of "generating" particularly attractive projects, services and proposals for hosting visitors on the farm, opening the company to local projects and participating in comprehensive programs for education about nutrition and the environment and addressing eco-sustainability issues (Stinga, 2004). For women multi-functionality is something lively, creative, full of ideas, leading to the discovery of new, more advanced ways for women to gain their identity, but also to learn how agriculture works.

3 Educational farms, education about nutrition and marketing strategies: some conclusions

Studies in the field highlight some distinctive features regarding the structure and activities of educational farms which provide food for thought about guidelines and tools for the development of these enterprises. Starting from their educational function, which in Emilia-Romagna is particularly linked to food education, it is necessary to use a broader approach to analyze future prospects. Indeed, the different activities on offer, and which are part of the multi-functionality of the farm, can be analyzed and developed using the strategic approach to marketing. The basic premise

is that a multi-functional enterprise can make major economies of scope by offering educational services, but this can not be improvised and requires, as well as a clear justification for the entrepreneur, some specific investment and modifications regarding corporate structure and organization. Analysis of these factors may therefore be based on the phases of strategic and operational marketing, in which it is necessary to define missions, goals, strategies and actions.

To define the mission of educational farms one must take into account the real motives which move the entrepreneur to join the project. These motives are influenced by the personal history of the entrepreneur and the farm, a predisposition to getting on with people, the situation in question, real adherence to the governing administration's aims and finding the balance between the desire to offer a service and how much the market and society in general will pay for it. In recent years there has been a shift in motivation, mainly concerning educational activities for schools, which is more purely economic and is more about diversification and promotion of the enterprise and its services. In some cases this change is likely to distort the 'philosophy' in question (education in agriculture, food and the environment), to replace it only with an increase in income. Besides, it is unthinkable that these activities are carried out only by highly motivated entrepreneurs who operate in a 'voluntary' spirit without being able to count on a real financial return for the enterprise. It therefore becomes important to bring together these two components and try to define clearly the areas where the company wants to act and the strategies it wants to employ. One notes, for example, the spreading phenomenon of 'social farms', in which users belong to disadvantaged groups (people with disabilities, ex-addicts, former prisoners and young people with learning or social handicaps, etc.) and where the company's mission is rooted in specifically ethical grounds⁴ (Franco and Senni, 2001); this service is a source of income for the company.

The *objectives* of entrepreneurs are highly sensitive to the particular features of the territory and socio-economic system where the farm is situated. It is for this reason that provincial, regional and national bodies express such greatly varying objectives, and this also creates difficulties in trying to coordinate efforts and improve the efficiency and the effectiveness of actions taken both by individuals, and by public bodies. If the only goal for opening an educational farm is to increase the farm's income, experience tells us that this is achieved only by companies that can accommodate a large number of guests (Mortini, 2003). In fact, they take advantage of the educational activities to promote more profitable services to the public such as agritourism and on-farm and off-farm direct sales of their products. In today's socio-economic environment enterprises express a variety of aims, but it is important to define priorities in order to be able to identify and make use of the available resources.

⁴ More details are available at the following link: www.Fattoriesociali.it. The regional administration of Emilia-Romagna has included 'agriculture in social cooperatives' within the category of 'agritourism' (Law 4/2009).

The surveys considered above confirm this need, indeed the motivations expressed by entrepreneurs range from 'ethical' to 'income growth', but the 'success' of the initiative depends fundamentally on clear expression of objectives, the quality and quantity of resources made available and the type of entrepreneurial approach.

This approach becomes evident with the definition of *strategies* and relative *actions* considering the four elements of the marketing mix:

- *Product/service*: The product strategy concerns the choice of programs to be activated, the chosen target, the timing of the offer and synergy with other company activities. The choices depend on the specific nature of the enterprise regarding such things as the type of cultivation, the structure and infrastructure available, the rationale and objectives of the entrepreneur and the human resources involved and their skills. In particular, the success of the initiative is closely linked to the ability of the people who coordinate the activities at each farm to find their own way to making the most of their "rural world" (Napoli, 2003). The importance of the specificity of the offer should not, however, make us forget that we need to find a reference system which lays down standards of expertise which should be common to all firms participating in the project. Tools like the aforementioned "Quality Charter" are the 'ticket to ride'. This should be allied to a tool for defining the services offered and to indicate what the quality factors are, taking into consideration the different viewpoints of the people involved. Obviously, the service offered is strongly influenced by external constraints such as the cost of transportation (which falls on the school and families in the event that there is not already a school service available) or legislative constraints on business (serving of food and drink only possible for tourist farms, enforcement of safety standards, etc.). The regional situation in Emilia-Romagna has shown a variety of services, in most cases linked to the particular nature of the locality but sometimes going beyond this as well as beyond any educational aims. In some cases there is a risk that the educational farms may become something 'other' than what they were set up to be, concentrating more on other activities, thus taking away resources from the specific work of the farm and lowering the quality of the service offered and generating confusion among its users.
- *Distribution*: Here transport becomes the main issue. The product or service is not transported, but there is the problem of transporting visitors to the farm (as there is for direct sales on the farm). There are various solutions, some more costly to the producer, others more costly for the user. For example, organizing busses to collect visitors on set days and at scheduled times is a possible solution. But it must be indicated who bears the cost and what kind of assistance is necessary to manage it. Concerning distribution, there are also issues related to activities carried out directly in schools, such as the transportation and conservation of products.
- With regard to *price*, variables such as the users themselves, the type of location, the human resources, the materials needed, etc., all determine choices on this issue. We have also seen how within the specific region there are

provinces which have induced farms to accept agreed and standardized prices. Each choice has its positive or negative side (e.g., greater transparency, less diversification and restrictive constraints on the service). It remains the case that price is the factor which notably influences visitors' choices, especially for schools.

- *Communication* is as always a key factor in the success or failure of these kinds of initiatives and the types and means of communication can vary greatly. The choice depends primarily on the persons involved in the information flow which is generated, e.g., between public body (regional and provincial) and enterprise, among public institutions, between public body and schools/other groups, between enterprise and schools/other groups and between company and individual clients. The regional farms in particular complain about a lack of support from the public administration in promoting their activities in schools. Each province has sought to develop a set of documents/guides which carry information about participating farms, but their distribution is often limited. The region, in collaboration with designated agencies, has published educational materials and some documents which came out of specific initiatives to support business activities. Even enterprises do not pay particular attention to communication. According to the mentioned surveys the primary mode of communication and promotion is word-of-mouth and this is also evident if we analyze data on the frequency of visits to individual farms: some are visited more often, above all by classes from the same school or school district. The majority of enterprises do not implement specific initiatives, mailing is used in a clear majority of cases, but the web is not among the means used for promotion and contact with customers. In terms of communication the limited request for grants is notable (e.g., only 30% asked for and received assistance under the Emilia-Romagna Regional Rural Development Plan 2000-2006, measure 3.P "Diversification of agricultural and related activities", Action 2) and can also be put down to inadequate publicity.

In conclusion, the experience of educational farms, being mainly prized for their work as providers of educational services, must be analyzed as a system which is more complex than it might have been originally. Recognition on the part of the 'public bodies' and of the market regarding this 'educational and social role' is not always up to the expectations of the enterprises themselves. This is why we believe that educational farms should try to move towards a marketing approach in managing and enhancing their activities. More particularly, in the following we propose a possible list of 'quality/strategies': it is a check-list of factors to be used to analyze and improve the educational farm system. The basis of this proposal is the list of quality indicators proposed by Bertacci (2005), which is the result of reflections on the design and implementation of educational programs on farms in Emilia-Romagna.

To this list, which specifically regards the relationship between schools and farms with an underlying 'social impact', further considerations have been added that take into account business factors and issues regarding the different types of users. From the business point of view, the strategic factors of educational farms are:

- Quality and meaningfulness of the proposal. Quality and meaningfulness must be assessed in the light of the objectives to be pursued. Customer satisfaction (schools, groups, individuals, but also public bodies) have become important tools for analysis.
- Shared project planning and continuity over time. For schools, integration with the Training Plan (POF) makes the project part of the schools' objectives, giving them strength and continuity. For other types of users, the project could be part of individual recovery/support schemes for people in difficulty, or be part of social and cultural programs operated by public or private associations. An appropriate evaluation tool should focus on how many objectives have been achieved. The planning process also involves defining the operational phases of projects which would follow a common reference framework (description of the entities, roles, timing, type of equipment, necessary forms, etc.) and also include the active involvement of end-users of the project (students, teachers, social and health workers, etc.).
- Diversification of the proposals.
- Interactive approach, workshops, leisure and sensorial methodologies. The methods used are important strategic features in the success of the programs. Here analysis entails an evaluation of teaching materials, sometimes developed by external experts, or the ways innovative tools are used in teaching.
- Adequacy of the structure itself. Safety is certainly the most relevant and important factor for organizations which host schools and groups. Farm structures are not always appropriate, and the necessary investments could affect business results. The company must still aim to make the farm ever more welcoming and safe.
- Reliability and competence of the contact persons in the company. It is possible to improve the level of professionalism amongst entrepreneurs through training (regarding both general methodology and the teaching of specific topics).
- Visibility of the service and availability of information.
- Adequate communication.
- Reference systems and networking. In order to improve and diversify farms, to adopt voluntary standards of quality and definition of levels of service are proposed. Any analysis should also consider the public body which currently needs to improve and redevelop controls and its quality charter (this can be a valuable source for analysis of customer satisfaction and an assessment tool for enterprises). Improvement of the service can also be achieved by stimulating forms of collaboration between farms. Cooperation among enterprises can certainly be encouraged by establishing clearer rules and specifications (e.g., protection of the educational farm's name, single address regarding Value Added Tax exemption, etc.) and enabling them to take advantage of the opportunities offered by national and regional administrations (grants, business expansion opportunities, other forms of cooperation).

- Special projects and synergy with other activities. Initiatives such as ‘school-farm twinning’ (e.g., food education) and sales of related products and services (speciality food and catering) can help to achieve some economies of scope.

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