

“Alpine Pastures Without Borders” and the “Museum of Alpine Farming”: Examples of sustainable rural tourism connecting Italian and Swiss Alps

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Abstract: *Technological, social and cultural transformations of the last decades have deeply modified the sector of primary production and – consequently – the relationship of people with food and the connected agrarian setting. Nowadays it is more and more difficult to know the way the food does before reaching our table and to know who produces it and how. Tourism in alpine farming may represent a way to meet consumers’ both ethical and environmental consciousness, approaching the consumer-tourist to the rural world and its healthier and safer productions. In this respect, an initiative of sustainable rural tourism has been developed within the EEC project Interreg III between Italy and Switzerland. An excursionist itinerary between Italian and Swiss alpine pastures called “Alpine Pastures Without Borders” was first of all created to connect Alpe Veglia (Western Lepontine Alps, Italy) and the Gottardo dairy factory (Airolo, Leventina Valley, Switzerland), covering part of the existing Helvetic “Strada degli Alpi” in Val Bedretto. The itinerary has been conceived in order to give tourists the possibility to approach farmers’ life and work, livestock and local traditions. Subsequently, the “Museum of Alpine Farming” was created inside the protected area of the Alpe Veglia-Devero Natural Park as a documentation centre of the trans-frontier livestock cultural system in order to present to a wide public the alpine cultural identity, and to promote the farms and their activities, with special emphasis on typical dairy production as a strategic resource for mountain economy. The museum collects all materials (objects, historical photographs, documents, texts, multimedia) related to the alpine pastures and coordinates a series of didactic activities, thus promoting the knowledge related to the theme of the alpine farming and its cultural meaning among past, present and future, putting the mountain environment, the rural culture as well as the alpine dairy products into value.*

Keywords: *alpine pastures, dairy products, museum, excursionist routes, socio-cultural impacts, environmental impacts*

Introduction

In the last decades a step-by-step transformation process has interested the agriculture of Italian North-Western Alps. This change was structural but also socio-economic being several agricultural activities abandoned. Nevertheless, in this general context, dairy farming production appears to be able to maintain some integrity, due to the long history of its presence in the Alps revealing to be one of the few economic opportunities for local resources still valuable (Orland, 2004; Bätzing, 2003).

In this context initiatives are needed to respect the natural vocation of mountain areas, which consists not only in the capability to breed animals, utilizing for their feeding medium and high pastures, but even in the cleverness to hand down and keep alive local traditions and milk and typical dairy productions too (Battaglini et al., 2006; Bianchi et al., 2003).

The ideas of the project *Alpine Pastures Without Borders* (an excursionist itinerary between Italian and Swiss alpine pastures) and of the *Museum of Alpine Farming* (located in the protected area of Baceno, Alpe Devero, Italy, 46°18'50.87"N, 8°15'37.84"E) were born at the end of 2005 in order to guarantee the continuity to an action system already started by Regione Piemonte, within the EEC project Interreg III. These activities were also linked to two other trans-frontier projects with France and Switzerland for promoting alpine farms and their relevant dairy products. Italian partners were Piemonte Regional Mountain Department and Veglia Devero Natural Park, Swiss ones were STEA (Ticino Alpine Economy Society), Leventina Tourism Office, and Regione Tre Valli.

The projects have been realised to set up a trans-frontier cultural system which shall promote alpine farming knowledge and its cultural meaning between past, present and future, also by making reference to features linked to alpine livestock and dairy activity carried out still up-to-date. They answered the need of initiatives aimed to promote mountain development, for evaluating environment, culture, crafts and typical products. Final tasks of the initiative were to put mountain agriculture into value, making stronger the link between rural development and territory safeguard, and encouraging the multifunctional features of alpine farming and husbandry, helping to obtain high quality agro-food productions compatible with the environment (Corti, 2003).

Region location and farming systems in the past and at present

The Italian area interested by the Interreg project is located in the Ossola valley, the Northern corner of Piemonte region (Novara province), bordering with Switzerland (Vallese and Canton Ticino) and is characterised by an humid and rainy (1,500 mm per year) climate.

In the high Ossola valley the cultivated lands are scarce and livestock represents the main opportunity. In the pre-World-War-II period this activity was based on the utilisation of different altitude surfaces (low-, medium- and high- alpine pastures) according to the season. Usually the Ossolano breeder was a small land owner (no more than five cows and some small ruminants) and was able to entirely produce the fodder necessary for his animals. The total cattle amount of the Novara province reaches 9,017 heads bred in 182 farms (Milk recording activity official statistics, AIA, 2008). The prevailing cattle breed is still today the Italian Brown sensibly improved for its dairy purpose in the last decades. Nevertheless in the past this breed, in its original stock, had a good meat aptitude too. Those animals main characteristic was their robustness favoured by their reduced body size and strong structure, which allowed them to better resist in harsh mountain conditions. Today, the genetic improvement has determined higher feeds exigencies and more evident risk of diseases (e.g. metabolic, udder and claw disorders and pathologies).

The alpine farm is still today the place where, from late spring up to the beginning of autumn, the breeders take cattle, first at low altitudes then at higher ones so that animals can feed themselves with grass particularly rich in nutrients and aromas.

During their staying in alpine farms, farmers business aims to produce milk to be transformed into cheeses, cottage cheese and other dairy products, or simply to make animals grow utilizing pastures forage (heifers and young categories).

Both in Ossola and in the near Swiss cantons' valleys, alpine farms areas are generally used by cattle herds from the second half of June for a 60-110 days period. There's a first pasture cycle of *tramuti* or *corti* at low altitudes (where end-summer re-growth is usually exploited), then high altitudes areas are utilized as season goes on (end of July – half of August).

In the past, alpine farming period was preceded by middle mountain pastures staying, locally called *mountains*. These places represented a strong source of forage productions which was consumed by cattle from April until the beginning of June. Cattle herds, transferred from bottom of valley stables, stayed on middle-mountain grasslands until high altitude pastures vegetal growth, after snow melting. During this period they consumed hay produced in the preceding year. In autumn, when cattle left alpine farming areas, stopped a second time on these grasslands thus exploited before returning to the valley bottom stables. Middle-mountain pastures were generally provided with buildings for cattle and farmers, since they constituted independent units of the farming business, due to the transport and communication difficulties (Verona, 2006).

During last years, many of these grasslands have been partially abandoned so that in some areas the wood is gradually gaining round. The *tramuti* or *corti* used by animals from the different alpine farms are today usually equipped both for milking and for milk processing. Cattle stables are – on the contrary – rare, since animals spend the night outdoor.

In these alpine valleys, it is possible to single out three main forms of pastures propriety: communal, private and union-type. Often, in alpine farms the whole family stays with its cattle along with animals from other farms.

The projects work on a territory still alive, where already other recent initiatives aimed to know alpine farming structures and their productions, such as Bettelmat cheese (registered mark) and Ossolano cheese, whose production areas and technologies have been widely studied (Battaglini et al., 2001).

These studies pointed out that in this alpine valley as to yield and quality of the milk destined to local cheese production it is possible to see important differences according to the management. Evident effects on quality were related to the breeding season: during alpine pastures season when animals utilised fresh grass were observed important increases of monounsaturated and polyunsaturated fatty acids and decreases of saturated ones with beneficial effects on human health as observed by other Authors in different alpine regions (Ferlay et al., 2002; Dewhurst et al., 2006). As a consequence in Ossola valley alpine pasture seems to have a determinant role in milk quality. That suggested an exact trend in choosing animals to be bred in such mountain environments preferring breeds less exposed to important quality variation, particularly negative for a typical cheese making. On the other hand, it can be observed that more extensive breeding systems could guarantee typical productions, animal welfare and a good environment management.

The reasons and the projects

It has already been mentioned that mountain livestock farming has gained during the last decades a multipurpose relevance. In this frame alpine farming - seen as a complex of pastures, rural buildings, animals, typical products and traditions – represents a resource not only for the shepherd but also for the whole population of that region, for its touristic, environmental, landscape and historic-cultural values (Table 1).

Table 1. The cultural alpine-pasture heritage

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|--------------------------------------|--|---|
| Tangible heritage | Vernacular architecture (barns, shelters, cheese-houses, sheds, etc.) | |
| | Semi-natural elements (wells, hedges, etc.) | |
| | Artefacts (fountains, bridges, dry stone border walls, fences, etc.) | |
| | Tools (for transport, milk processing, animals handling, etc.) | |
| Biologically based cultural heritage | Domestic autochthonous breeds | |
| | Pastoral and anthropogenic cultural landscape | |
| Non-tangible heritage | Knowledge and lore related to pastoral and dairy activities and relationship with nature | <i>animal knowledge</i> : ethology, physiology of domestic and wild animals |
| | | <i>technological knowledge on foods</i> : cheese making and storage of dairy products, preparing and preserving meat |
| | | <i>botanical knowledge</i> : toxicological, food, technological properties of plants and derivates, phenological stages, growing season, etc. |
| | | <i>environmental knowledge</i> : hydrological, soil, geology, meteorology, etc. |
| | Linguistic heritage | <i>toponymy</i> |
| | | <i>lexicon</i> |
| Folk heritage | <i>rituals</i> of propitiation and fertility, legends, taboos, supernatural presence, etc. | |

For these reasons and for the intimate and harmonic interactions between man and Alps, during several generations, the cultural alpine-pasture heritage needs to be protected. Terracing, woods and pastures care, water management, vernacular architecture, local breeds are typical examples thereof. As a consequence alpine farming reaches a relevant cultural meaning for livestock farming and cheese-making techniques and needs to be preserved.

The main impacts foreseen by the projects are listed in the following points:

- i. creation of a trans-frontier cultural system for promoting alpine farming and pastures;
- ii. implementation of a museum net with trans-frontier links for the knowledge of the alpine environment natural patrimony (analogies between Italy and Switzerland);
- iii. cultural and touristic alpine farming promotion factors, cultural identity, professionalism, women and young people role, improvement of social relations and opportunities;
- iv. impact upon tourists, granting allowances – not just economic – to alpine farming actors (promotion of positive socio-cultural interactions for renewing personal prestige of alpine farming actors);
- v. fall-out of positive effects upon University didactical purposes (stages and researches on alpine farming themes).

The project starting point is the alpine farm, which can be considered as a place, almost a *lab*, where the tourist interacts with typical environment, culture and tradition. It may represent a possible example of rural education - at the same time a structure and a resource for summer holidays. Alpine farming activities include *live* demonstrations of cheese-making, popular transhumance festivals (e.g. herd ascent/descent to/from alpine pastures), etc. Most important, alpine pastures represent places where animals - through grazing activity - contribute to the maintenance of botanical biodiversity (Mair et al., 2006).

The itinerary *Alpine Pastures Without Borders*

Alpine Pasture Without Borders is an itinerary which connects the Alpe Veglia (Italy) and the Gottardo dairy factory (Airolo, Leventina Valley) in the Swiss region - as a part of the Helvetic *Strada degli Alpi* in Bedretto Valley - passing through the *Museum of Alpine Farming* in Alpe Devero and the San Giacomo Pass (a former important exchange connection with Switzerland).

The itinerary allows tourists to visit Italian and Swiss alpine farms and pastures so giving the possibility of politely and respectfully experiencing the way of life of different actors by observing their activities, animals and pastures, actively participating to local festivals and traditions too. In this way alpine farm becomes a place where:

- i. the alpine breeder gets more income;
- ii. new job opportunities for young people are possible;
- iii. alpine communities are supported, even socially;
- iv. *in situ* rural education is made;
- v. traditions and customs are cared;
- vi. a sustainable tourism allows a global mountain valorisation.

The *Museum of Alpine Farming*

The *Museum* (Documentation Centre) *of Alpine Farming* is located in the protected area of the Alpe Devero-Veglia Natural Park in the premises of the former arrival of an air cableway station and of the near buildings in the Baceno commune. The Museum initiatives bound to the project have didactic and research aims and includes school- and tourists- oriented museum itineraries through setting up of different features (infrastructures, route markings, leaflets and multimedia). Products from different interest fields (e.g. research results, photographs of events and didactical material) are exhibited in the documentation section of the Museum. Besides collecting evidences and historical documentation, just as a museum is expected to do, the main idea of this reality is to define the rural environment as a great space of research, in order to socially and economically evaluating the territory, getting to involve students and teachers of all ranks and those people who get close to the alpine environment, re-discovering and thus recovering the relation with nature. They will therefore better know the connection between environment and products of cultural traditions of their own region.

The study of territory, business, crafts which have characterized it in the past, and of its economic and social evolution, has a great importance especially in the present historic situation, during which industrialization and progress are more and more quickly expanding themselves. The link between morphology and environmental features of a place, the interaction with local population, the collection of written and oral sources, the reading of historical, literary, photographic documents, the research and cataloguing of antiques related to alpine business and crafts, constitute essential elements for understanding and recognizing traditions' value.

The Museum, represents – through present and historical tools and pictures, multimedia, etc. - both a real and virtual place which can be visited all the year long.

The *Museum of Alpine Farming* and other initiatives linked to it, originating within the Park, deem to protect Veglia and Devero alpine farming realities. On Swiss side the Gottardo dairy factory - where for instance students can assist to guided cheese-making demonstrations - and the *Route of Alps* in Bedretto Valley - a pathway at a high altitude which joins the main alpine farming structures of the area – were previously created for analogues purposes.

Conclusions

The mountain specificity may represent a very important catalyst of different compounds aimed to promote an integrated rural development.

It is well known that agriculture – particularly livestock systems – has touristic and cultural externalities due to its typicality and biodiversity. These opportunities need to be properly addressed to increase new ways to *live the mountain* through hiking aware of this complex alpine environment.

The projects here described are within the viewpoint of the integrated and sustainable promotion of economy in alpine areas, considering a multipurpose valorization (botanical biodiversity, landscape value and recreational opportunities) as the only way to find a balance between products quality, profitability and environmental sustainability.

Tourism in alpine farming may represent a way to compare cultures and old-fashioned learning with visitors' modernity. Technological, social and cultural transformations of the last decades have deeply modified the sector of primary production and – consequently – the relation of mankind with food.

As a matter of fact, it is more and more difficult to know the way the food goes through before reaching our table and to know who and how produces it. On one side, being tourism fed by people who care natural values and local traditions, has the merit to recognize to alpine farms workers a social function and a professional dignity.

Environmental safeguarding in the present historical moment has the important task to *transmit* to future generations a natural and environmental patrimony – integral as much as possible.

It is therefore necessary to kindle a sensitivity and a responsibility in citizens and tourists of any age so that they adopt behaviours and life-styles compatible with nature. As an effect a full awareness of the meaning of these items will be able to guarantee better life conditions to present and future generations of this rural population.

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