





Multifunctional farming is revitalising rural life in Abruzzo

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Abruzzo is a region in the Apennine Mountains in Central Italy. After a period of serious economic, ecological and socio-cultural decay, several interesting endogenous developments have emerged. This article is a result of a study for the European Network for Endogenous Development (ENED). It describes a very successful initiative based on local sheep farming. The concepts 'multi-functional farming', 'economy of scope' and 'network economy' were crucial in this initiative.

The Abruzzo region is rich in biodiversity and varied landscapes. Some 70 years ago a large part of the region became a national park: the oldest and most important one in Italy. Today it covers an area of 44,000 hectares divided in different zones. The full protection areas are not accessible to visitors, while other zones include tourism and agricultural activities. In the spring and summer large herds of sheep can be observed in the mountain pastures. Traditionally, sheep and goat breeding were key economic activities in the area, which used to be the wool-producing centre of Italy.

This started to change in the 1960s and 1970s when wool production gradually transferred to countries with cheap labour. Governmental pro-

grammes to support Italian sheep breeding focused on privatisation of the pastures, specialised lamb meat production, and animal disease control. Most of the efforts however were not appropriate to the local mountainous conditions. In the same period, agricultural modernisation led to more intensive use of the pastures, resulting in severe degradation. After a while the pastures were no longer suitable for sheep grazing, and many sheep farmers started looking for other sources of income. Biodiversity decreased and the landscape became less attractive for tourism, also because of the decay of the *stazzi* - the open stables for herds in the mountains. The regional economy was weakened and a process of out-migration started.

Formal opinions changed

Initially the official institutions blamed the farmers for the ecological changes. The policy of the Nature Parks also considered agriculture in general, and sheep breeding in particular, harmful activities for the natural environment. The farmers, however, were convinced that without regular grazing biodiversity would decline, and ascribed the ecological changes to the support programmes, which they considered unsuitable in their local mountainous conditions. When depopulation became clearly noticeable, several NGOs, policy makers, politicians and representatives of various institutions connected to the national park, started to become alarmed. Halting the de-population became a priority of regional and national policies.

At the same time, regional policy makers, the Park authorities and other involved institutions started to change their views on the combination of agriculture and nature. This was due not only to the growing understanding about the link between ecological damage and the decreasing agricultural activities, but also to scientific research data that underpinned traditional experiential knowledge (referred to in Milone 2004). These data showed, for example, that extensive (sheep) grazing, provided that it is attuned to the carrying capacity of the soil, is a crucial factor in balancing the Apennine eco-system. Expanding forestry, which was initially considered an alternative for the grazing areas, proved less functional in this respect.

The loss of income and employment within the region was another driving force in the change of opinion. Meanwhile, official recognition of organic farming both at the national

Box 1 Underlying worldview, values and skills

The sources of inspiration for this work included a set of motivations, values and views. The starting point was (1) a shared dream. This dream was rooted in a passion for nature, social commitment, a strong connection with their own rural background, respect for local traditions, as well as an urge for self-realisation. This dream triggered their desire to re-vitalise the area and to stop the loss of biodiversity, traditional landscapes and local culture. This was also motivated by (2) social commitment to local villagers; the pioneers felt challenged to stop unemployment and depopulation. Another driving force was (3) the pioneering spirit: expressed by a continuous search for new products and services, as well as methods of production, processing and marketing. Simultaneously they have been searching for institutions and policies to support them. This connection makes their approach really innovative.

The pioneers also shared the view that they needed (4) to work with - instead of trying to overcome - the local ecosystem (Flora 2005). This approach to nature is generally referred to as 'stewardship'. The relocation of agriculture within the ecosystem also required (5) the ability to acquire knowledge and experiences of old shepherds.

Other essential attributes are (6) self-esteem and creativity, as well as (7) a strong wish for autonomy. They needed to find ways to become independent from the dominant agricultural regime. Opposition to mainstream policies that promoted specialised intensive farming, was part of this struggle. A key to realising this was (8) establishing cooperation between like-minded farmers in the area. This required an attitude change amongst the farmers as co-operation was not a value embedded in the local farmers' culture. The successful teamwork of the two pioneering farms convinced the other farmers of the value of co-operation. The (9) ability to build strategic alliances with different societal groups, such as environmental movements, consumers' organisations, scientists and politicians, was another skill required in this process.

level and by the European Union in the nineties, as well as the new EU Rural Development Policy, offered new economic opportunities.

Local endogenous initiatives

Meanwhile, some sheep farmers decided to start their own initiatives. They believed that sheep breeding in mountainous areas could be a profitable and sustainable activity. In their view sustainability required a multifunctional farming approach, rather than an increase in scale, intensification and specialisation. Crucial elements in their strategies were the reconnection to resources in their own environment, the differentiated use of resources, the diversification of products, and a focus on high-quality products. They considered paid work outside the farm as complementary to their quality organic agricultural production.

Equally important were the new relationships established between farmers themselves, and between farmers, their institutional environment and consumers. The pioneers initiated cooperation between farmers, and established their own independent marketing, lobbying and advocacy networks.

At first, regional institutions did not trust these initiatives. But gradually they realised that multifunctional farming did indeed have the capacity to deal with the many-faceted problems of the region: ecological degradation, regional economic problems and out-migration. Thus policies started to change, and support for multifunctional

farming became the spearheading concept. As Ventura and Milone (2004) observed, the pioneers initiated a 'quiet revolution in agriculture'.

The pioneers

Manuela Cozzi and Nunzio Marcelli are two of the pioneering farmers. Nunzio Marcelli was born and raised in the region and graduated in economics from Rome University. Instead of making a career in the city he wanted to follow his passion and become a shepherd. Manuela Cozzi comes from a village in the north of Italy, and did agronomic research in the area. Her findings that the pastures contained at least 120 different herbs resulted in a strong affinity with the region.

They both had the same dream. Manuela explains: *"For self-realisation, everyone needs an aim in life. Our dream was to valorise this area again, proving that farming activities could be sustainable here. We believed that productive activities related to sustainable sheep breeding would have potential. We also wanted to create new job opportunities to prevent people from leaving the region."*

When Manuela and Nunzio began to farm in Anversa, a village within the Abruzzo National Park, all other farming activity had ceased. But from the start, they were convinced of the viability of multifunctional farming, or 'economies of scope'. This strategy would link the pillars of local rural sustainability - agriculture, nature and tourism - and strengthen the income basis of the

farming family. The plan was to develop the farm in a stepwise way. The first step would be setting up an organic sheep breeding branch, in line with the traditional practice of mountainous pasturing. Processing and marketing various products would be the next steps.

To buy a farm and start the farming Nunzio worked full-time as a teacher and Manuela as an agronomist. In 1977, together with seven family members they established the 'Co-operative ASCA La Porta dei Parchi'. By 1983 they had built up a herd of 160 sheep on 56 hectares of land. At present they own 1500 sheep and 15 cows and have the use of 110 hectares of land. They now both work part-time.

A third pioneer is Gregorio Rotolo, born and



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Cheese-making of sheep milk has become profitable again. Traditional recipes and further training has inspired the cheese-makers to develop different kinds of cheeses, which have won numerous prizes.

raised in the area. With the money his father gave him to finance his studies, he secretly bought a herd of sheep, went up into the mountains and stayed there for six months herding his sheep. After this trial period he went to his father to tell him that he had decided to become a shepherd instead of a priest. With his father's blessing he started a farm, together with his nephew Dino Silla and his mother. Currently, their herd comprises 1500 sheep.

Rediscovering local resources

To create extra value, the pioneers chose for minimal dependence on external resources, and sustainable use of local resources. The local resources include the mountain pastures, the valley lands, the local sheep breed, nature, landscape, local cultural traditions and local real estate. Empty farm houses are used to sell products, to house tourists and for educational activities. Human resources include labour power, knowledge, skills and cultural heritage, local traditions and expertise and the newly created cooperation between farmers.

Important external resources are institutionally provided resources, such as formal schooling and training, extension and research. Specific subsidies (EU, national, regional level) have also facilitated the development of the initiatives.

Product differentiation

The pioneers recognised that a sheep breed adapted to mountainous condi-



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The herbs of the mountain forage stand at the basis of the different cheese varieties. By moving the herd and varying the period of grazing, the shepherd can influence the flavour of the milk and cheese.



tions was needed, and one that produced milk as well as meat. The choice of a traditional regional breed, the *Soppravizzano* sheep, was obvious. After several years, both farms decided to process milk into cheese. Initially, they produced only one type of cheese, but when affluent consumers became more interested in buying organic food and region-specific products, they diversified their cheese production. The pastures provided an excellent basis for product differentiation. Manuela: *"The forage of the mountain pastures is very rich, and contains many different herbs such as mint, oregano, wild fennel and juniper berries. You can taste this in the cheese and the meat. This diversity is crucial for our products."*

By moving the herds between pastures with specific herbs, and by varying the period of grazing, the shepherds can influence the flavour of the milk and cheese. Knowledge about this was acquired from old shepherds. The traditional wooden equipment gives an extra taste to the cheese. Traditional recipes further inspired the cheese-makers to experiment with flavour. Formal training on cheese making and experimenting resulted in even more types of cheese. Gregorio and Dino now offer nine different regional cheeses, and have won numerous prizes.

The second sheep product is meat. Though lamb meat used to be the core product in the region, a new market opened after the decision to process part of the sheep meat into salami and sausages. Muslims in Italy and abroad show great interest in these products. A new market was discovered for wool as well. Processed wool is now sold as yarn, knitted clothes, blankets and socks. The wool is dyed using herbal dyes from the mountain pastures. Elderly women earn extra income by colouring the wool and knitting clothes

and blankets. Even soap and organic manure have now found a market.

'Adopt-a-sheep'

A new and very successful effort is the 'Sheep Adoption Project'. People from all backgrounds can adopt a sheep from the farm. They pay the farmers between 80 and 190 euros per sheep on a yearly basis. In return, the 'adoptive parents' receive a 'certificate of adoption', a package with farm products (cheese, meat, salami, woollen socks, olive oil), a discount on the tourist accommodation, or one of the courses provided by the farmers. They can also visit their sheep, and have a free meal in the restaurant. So far, 1200 people from all over the world have signed up for the adoption campaign.

Nunzio: *"The idea arose in 1996. After we opened the website in 2000 the project gained momentum. Adopting a sheep is, in fact, an age-old tradition in this region. Local people who moved to cities gave the farmers money for producing their foods. During their visits to the village the citizens would come to fetch their foods (meat, salami, cheeses, etc.) and then returned to the city with a food supply that lasted until the next visit."*

Tourism

Mountain sheep and cattle breeding is an indispensable activity for attracting tourists to the region. At the same time tourists constitute a good market for the farmers, who have opened their own selling points, a slaughterhouse and a butcher shop. Step-by-step, Manuela and Nunzio have also established tourist accommodation and an on-farm restaurant as extra income generating services. Dino: *"We have a future now. Today, people from the cities like to go to a restaurant on a farm. They say it gives them the opportunity to experience something of the rural culture, eat local dishes, and participate in cultural events. They go to local markets, have contact with animals, and learn about farm life and farming. This is of extra value to them."*

Lately, Manuela and Nunzio have also extended their services to include educational courses about farming in the National Park, as well as creative and spiritual workshops. The services are aimed at different groups of tourists, especially urban residents, schools and training centres. *"The courses we offer are a gateway to enjoying and rediscovering*

'sleeping senses': creativity and healthy relationships between people and environment. We are building a different way of approaching culture and nature."

Intensive use is made of modern technology: a website gives information about the background, motives and activities of the farm. According to Manuela and Nunzio the website creates global visibility for a small farm at very low cost, and makes it possible to promote and sell farm products and services.

New patterns of co-operation

The pioneers have inspired other farmers who have shown interest in producing region-specific products and in working together. To facilitate inter-regional co-operation, a consortium was started named ATER. Its aim is to shorten the chain between production and consumption through improved marketing and reduced transaction costs.

Exchange of information and generation of new knowledge also belong to the tasks of the network. New knowledge is developed in close co-operation with supporting scientists through on-farm experiments (field laboratories) and other research projects. ATER also facilitates the participation of members in different (semi)governmental programs. Today, the ATER-network includes fifteen farms. The members are largely organic producers that process their products into a variety of traditional regional (or typical) products. An excellent distribution system has been developed for many types of cheese and meat, woollen products, biological fertiliser, vegetables, olive oil, pasta, jams, preserved fruits and honey.

Nuncio explains: *"On the conventional markets regional products have no extra value. We needed to find new markets which was quite a difficult and time consuming task. We participated in gastronomic events, food contests, exhibitions, and fairs and linked up with organisations in the field of gastronomy. Examples are the Slow Food movement and the Accademia Italiana della Cucina. In this way we were able to convince the consumers of the quality of our products. Our strategy was successful; new markets include top restaurants and specialised shops in Italy as well as abroad."*

Political influence

Encountering obstacles that hindered the application of their ideas also spurred the pioneer sheep farmers on to organise themselves politically. In 1988 they founded a regional associa-



Manuela Cozzi: Besides milk and cheese, we are offering meat, processed wool, tourist accommodation, educational courses about farming and an on-farm restaurant. A new and very successful effort is the Adopt-a-Sheep project, which links rural producers with urban consumers.



Different stages of cheese-making: stirring the milk and curdled milk for cheese. The EU sanitation rules almost ruined the traditional ways of cheese-making based on raw milk. By proving the excellent hygienic quality of the milk, the experimenting farmers now have a certificate that they are complying with EU regulations, though they do not pasteurize their milk.



tion for sheep and goat producers, ARPO, which has played an important role in overcoming institutional obstacles that threatened the traditional cheese-making. The growing package of rules and regulations, issued to manage the problems caused by modern agricultural production methods and techniques, endangered the continuity of farming in the region.

Manuela: *"We know that the EU-sanitary rules for cheese-making have ruined the traditional way of cheese-making. Almost all the farmers here stopped making cheese because of these requirements."*

The EU rules do not allow the use of raw milk (milk must be 'pasteurised') or the wooden equipment for cheese making. Cheese must be made in tubs made of steel. The pioneer farmers started to search for ways out and enlisted the help of their broad network to overcome these hindrances. Especially Manuela put a lot of time and energy in this activity. The end-result was that the farmers achieved exemption from standard EU-food safety regulations.

The strategy of multi-functional farming created extra income and employment at local level

Manuela: *"I knew that the arguments did not fit in with practical experience. Wooden tubs are more hygienic than steel because wood absorbs the bacteria. Steel must be washed and it has been scientifically proved that washing speeds up the bacterial activity. ... I first studied all the newly proclaimed sanitary rules and regulations, then I lodged a protest against these rules. I stressed that the text of the law requires 'milk of good quality' and nothing else. So my duty was to prove that our milk was of a good quality. That was not so difficult because we had the certificates from the milk checks. Next, I approached my contacts at university and in politics. I asked some friends and former col-*

leagues to do some research. The results supported our experiential knowledge. We now have an EU-certificate stating that we comply with the sanitary rules according to EU-requirements."

Yet, several issues still need permanent attention. Serious problems lie at the administrative and political level. Manuela as well as involved researchers and policy makers stress (1) the limited synergy with local administrations, (2) a lack of clear rural development objectives within politics and (3) bureaucracy. A big problem is that policy measures are still geared to the modernisation model. The normative framework for multifunctional farming is created by policy-makers, politicians and researchers, rather than by farmers themselves. Manuela: *"The politicians have their own vision on multifunctional farming; one which is disconnected from rural practice"*.

Economic and social benefits

The strategy of multi-functional farming created extra income and employment at local level. Farming families can once again think of farm enterprise continuity. A research programme comparing the economic performance of multi-functional farms to the conventional farms has indicated that, although their total costs are higher, multi-functional farms also make higher profits than the conventional ones (Milone 2004). On the sheep farms the difference in net income per sheep is 10.80 euros; on the dairy farms it is over 700 euros per cow; and in the horticultural enterprises it is 540 euros per hectare. Manuela: *"We created 15 new jobs in a village of 300 inhabitants, where the average age is 60 years. That means that we have generated relatively more jobs than FIAT did in Torino."*

New jobs are accessible for women as well, for example in the farm shops. They regard this as a step forward in the quality of their work, as it is physically less exhausting than working on the field or in the mountains. Moreover,

regional identity has been strengthened and quality of life has improved. The initiatives of the pioneers have brought tourists to the region, and re-initiated traditional local events and fairs.

Young people no longer turn their backs on the countryside as farming has once more become a profitable and attractive activity

Apart from income there have also been social gains. The success of the cheese branch has increased the social status of the families involved in this activity. They are now considered skilled producers of reliable region-specific food products. Being regarded as a good cheese-maker has improved their self-image.

Young people no longer turn their backs on the countryside as farming has once more become a profitable and attractive activity. The financial success, the increased social status of the producers of region specific quality foods, and the social identity linked to participation in the networks seems to appeal to them. If the younger generation is attracted to these tasks, there is hope for the continuity of farming in Abruzzo.

References

- Flora, C.B. (2005). Review of 'Seeds of Transition' In: Journal of Environmental Qualities, vol 34, January-February 2005, pp. 400-401.
- Milone, P.L. (2004). Agricoltura in transizione: la forza dei piccoli passi. Un'analisi neo istituzionale delle innovazioni contadine. PhD thesis Rural Sociology Chair Group, Wageningen University.
- Ventura, F. and P.L. Milone (2004). Novelty as Redefinition of Farm Boundaries. In: Wiskerke, J.S.C and J.D. van der Ploeg (Eds) Seeds of Transition. Essays on novelty production, niches and regimes in agriculture; p.54-92. Royal van Gorcum, Assen. 2004.

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