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# INTEGRATED PROJECT OF FOOD CHAIN IN THE PROTECTED AREA OF POLLINO

Francesco Contò<sup>1</sup>, Piermichele La Sala<sup>2</sup>, Paolo Papapietro<sup>3</sup>

## Abstract

The introduction of the Integrated Projects of Food Chain requires the development of models capable of interpreting the dynamics of vertical and horizontal coordination between agents and the definition of the issues that mostly affect the ability of professionals to provide added value to goods and products and to acquire a competitive advantage in exchange.

With reference to setting up Local Production System of the Pollino - Lagonegrese, characterized by the development of an "atypical" food chain, for which the main factor of integration and competitive advantage lies in the strong link between companies and territory and in the social and economic value of the agriculture of protected area, this work focuses on the importance of the natural resources to the development of the food chain in the mountain region.

**Key Words:** Food Chain, Protected areas, Rural Development, Integrated Project of Food Chain, Local Production System Pollino-Lagonegrese

## Introduction

The agro-food industry is evolving towards new and complex forms of organization characterized by a greater degree of coordination, whether in the form of vertical integration of explicit or implicit contract between players of different levels of the food chain.

The causes of this structural and organizational evolution are related to different issues, whose weight greatly varies depending on the sector.

<sup>1</sup> University of Foggia, Professor, Largo Papa Giovanni Paolo II, 71100, Foggia, Italy, phone: +39 3293606233, e-mail f.conto@unifg.it

<sup>2</sup> University of Basilicata, PHD Student, Viale dell'Ateneo Lucano n. 10, 85100 Potenza, Italy, phone: +39 3384000801, e-mail pmlasala@yahoo.it

<sup>3</sup> University of Bari, PHD Student, Piazza Umberto I° n.1, 70121 Bari, Italy, phone: +39 3466722227, e-mail p.papapietro@lex.uniba.it

However, the underlying driving forces may be due to three factors at least:

- a) those related to changing consumption and therefore demand for food and agricultural products;
- b) those related to the organization of the markets upstream and downstream supply the same products;
- c) those related organization of the upstream and downstream markets of the agricultural sector.

Often, the common feature in many food chain is in the role played by farmers or, in general, by the agricultural sector, capable of reacting passively to stress imposed by other economic sectors without being a part. This is a datum that causes a loss of competitiveness of this stage of the process, frequently unable to innovate and to lay down rules according to what should be its "natural force" against an organization of food chain which is the engine: it's an agricultural world incapable to be the protagonist in exchange relations, which are important to survive in a market economy.

Therefore, the development of mechanisms becomes essential to capture value at first for the production phase in order to push and to increase competitiveness of the whole food chain. In order to reach this result it is important to start from the experience of Integrated Project of Food Chain (IPF) developed in the Rural Development Program (RDP) 2007 – 2013 in order to analyze as their contribution have defined a model of food chain basically in line with what happens in practice.

The analysis was conducted on an "atypical" food chain: the agro-territorial food chain of Pollino, located in the Local Production System forming Pollino - Lagonegrese and characterized by an aggregation or intersector umbrella which aims on quality and identity of local productions, for which the main factor of integration and competitive advantage lies in the strong link between companies and territory and in the social value and economic implications of agriculture in protected area.

### The Food Chains in The Protected Areas

The agriculture in natural areas, typically coinciding with the areas of hill and mountain, asks food chain integration models different from those typical of production systems characterized by intensive and specialized agriculture: specifically it speaks of zero distance, farmer markets, short chain and neighborhood. In particular it deals with models that can change the productive and socio-economic structures of territory, through the development of chain operations, that taking into account the specific context of industry and the relationships between actors in the chain, combines at the best the value chain resulting from calls for RDP in terms of territorial organization and governance of environment and territory, as a consumer.

It deals with food chain for which they were developed ad hoc calls to apply the RDP 2007 - 2013 the implementation of integrated projects aimed chain of protected areas and proximity:

a) The supply chains of protected areas are typically all-embracing specific to certain areas occupied mostly by parks (chains of protected areas), that focus

- primarily on quality and characterized strongly territories within which these protected areas are located;
- b) the proximity chains are aimed to bringing the smaller producers to market local (regional one), with specific reference to that of urban areas, including tourism ones.

In the first case, it is about chains – all-embracing or intersector – that point primarily on the quality and territorial identity of the productions for which the main factor of integration and competitive advantage lies in the strong link between companies and territory and in the social and economic value of Agriculture of the protected area.

In the second one, it can speak about agro-territorial chain that go beyond the classical approach for the sector, privileging multiple aggregation including in different sectors or in many marginal producers, whose interests can not be represented in the traditionally designed sectors, focusing on large specialized production and concentration of financial resources. For this chain, the objective is to reduce the distance from the market, overcoming the classical approach to the stages of transformation, distribution and marketing because of volumes and bargaining power which is different from those typical of other productive dynamics.

For these contexts, it is very important to combine the needs of biodiversity and multifunctional income and efficiency of the supply chain.

However, it remains open the question about the ability of these forms of organization of the supply chain in order to ensure, at local level, the increase of production income and the identification of regulatory mechanisms that can ensure greater quality certified to products at the benefit of producers and consumers.

## **Integrated Projects of Food Chain in the Area of Pollino**

The subject of this work is the area of forming "Local Production System of Pollino – Lagonegrese", including 27 municipalities, all in the province of Potenza, located in the south west of Basilicata at the border with Calabria and including full Basilicata side of the Pollino National Park. About the organization of local development, it is important to underline how the all territory is included in Lucan side of the Pollino National Park, except four municipalities. In the area three mountain communities insist that, pursuant to Regional Law (RL) n. 11/2008, will form a single Local Community including all municipalities of the area, coinciding with the area of the Integrated Territorial Project (ITP) Lagonegrese - Pollino.

In reference to the Program Leader, the whole organization falls - at least with reference to the programming period 2000-2006 - in a Local Action Group (LAG ALLBA).

The Local Production System was created with the aim of building through consultation, a network of local development actors in order to represent the interests, the quality and the potential of the territory and channel resources towards projects and leading sectors in the area. So not only agriculture sector, but also farm and food ones based on local products, trade, crafts and enhancement of cultural, natural and scenic goods.

Therefore the agri-food sector plays an important role in the local economy and it is increasingly emphasizing its multifunctional vocation about growing integration with other activities (such as crafts, services, tourism, etc..) that represents the decisive factor in setting environmental and territorial policies. However, the territorial structure, typically range, the low generation change, the pulverization of the companies is among the main factors that hinder the development of agriculture in this area.

For the area of Pollino, Integrated Planning of Food Chain has followed the path identifying the industry umbrella as defined in the notice published Explorative focused on implementation of Integrated Project of Neighborhood Food Chain and Protected Areas in 16/12/2009 by Basilicata Region.

Through the investigations carried out by administering questionnaires to sample firms that have participated in the activity of territorial animation with the aim of promotion of integrated plans of supply chain, they show the opportunity to make productive the system chains already activated in previous years and which are the economic base and productivity of local production system.

To this end, it have been identified as a goal the industry umbrella of the National Park of Pollino, implementing and developing the system of multi-sector supply chains that form the economic basis of local production system.

To this end it is important, at first, improving and restructuring of farms and processing, including through the introduction of innovations in production processes and adoption of new services to support the entire production system.

Specifically, the investigations undertaken in the studied area, demonstrate the importance of:

- 1.the implementation of the training for agriculture and forestry, promoting the acquisition of strategic skills;
- 2. the transfer of knowledge through the use of a farm advisory system established in the region in accordance with article 13 of Reg (EC) No 1782/2003;
- 3. the reduction of production costs, including through the introduction of innovations process and product optimization of production factors;
- 4. the improvement of the quality of agricultural products;
- 5. the increase of employment levels;
- 6. the structural adjustment of firms for participation in the quality systems;
- 7. the remuneration to the producers of the raw material base;
- 8. logistics and organizational processes;
- 9. the environmental performance of production processes in agriculture, food and forestry;
- 10. the diversity of sources income of agricultural households;
- 11. the promotion of the sustainable development of the supply and use of innovative energy sources.

Moreover, in order to benefit from the opportunity provided by the integration of component manufacturing with the territorial source of competitive advantage in an area such as that of the Pollino, it becomes essential to promote integration with other sectors of production and diversification of the Pollino system chain.

Thus, they were identified as specific objectives:

- the increase of product quality beyond the standard commercial product related to public health and welfare or environmental protection;
- the assurance of the traceability of products;
- the increase of the added value of primary agricultural products;
- the information given to consumers and business operators about the quality, the nutritional characteristics and methods of production of individual products;
- the creation of new employment opportunities in rural areas;
- the building of recreational facilities, small hotels and information centers;
- the training of new professional figures linked to the creation of employment opportunities in rural areas.

The verification requirements of the business of the Pollino National Park was conducted throughout the country, gathering with special needs in the summaries of the types of eligible investments and correlate with measures of RDP of Basilicata Region 2007/2013.

The survey, which involved more than 500 food businesses, showed a strong need for investment in business, many of them for the introduction of process innovations and product to improve the quality of agricultural products and increase employment.

The types of investment required are polarized, then, the improvement / construction of buildings and purchase of new machinery, equipment, including computer programs, and absorb about 45% of financial resources required.

This figure is to be interpreted in light of the monitoring of EAGGF ROP 2000-2006 and other community programs: the Pollino - Lagonegrese appears to be the region where child has been in relation to territorial extension and the presence of farms, flow of financial resources provided (only 4.8% of funds directed to the individual).

The motivations are to be found in both of the characteristics of agriculture, represented by small business infrastructure, which have objective difficulties of relationships and communications related to the orography of the territory and low infrastructural facilities, which have effectively limited the access to facilities and funding.

Finally, in order to complete the multi-industry sector of the Pollino National Park it has emerged the need for investment phase of processing, especially for the construction, upgrading or renovation of buildings for processing thereof. Concerning the marketing and processing of farm products, great importance has been given by operators of different sectors at implement opportunities that stage within the network of rural houses and farms.

Another important aspect is the introduction or reintroduction of products resulting from the varieties / cultivars with extinction. In fact it's very active in the Park a recovery and conservation of biodiversity of plants whose cultivation has been gradually diminishing over the years, to replace varieties with higher market demand. In this phase of revaluation of indigenous genetic it is necessary to exploit, both for reasons of environmental and landscape, and for the rediscovery of ancient recipes and culinary traditions.

Concerning actions to be implemented with the IPF, in relation to specific land, classified by the RDP as an area D1 - Area for agriculture with advanced organizational

models and the needs of the food industry, were identified - from companies surveyed - the activation of all the measures set out to tender the notice published exploratory, with different intensities.

In recent years, the activation by the Park of the aggregation processes between companies, has driven them to dynamic organizational models, however, affected by structural weaknesses, the presence of which inhibits a broader development chains themselves. This justifies the increasing demand in terms of financial, operations attributable to measures 121 - Modernization of agricultural holdings - and 123 - Adding value to agricultural products and forestry.

The measures most typically attributed to the diversification of the rural economy are also substantial in size (more than 30%), underlining the need for activation of integration processes, someone already established with other Community funding programs, aimed to improve the quality of life and develop the territory.

## The "atypical" food chain of the Pollino: the role of protected areas.

The role of parks and protected areas is fundamental to the revitalization and enhancement of agro-food chains in the inner areas. At the urging of the Park Authorities, Basilicata Region has recognized this point and it has considered advisable in the planning stage of the Integrated Projects of Food Chain, to satisfy needs of other areas of industry such as the Dies of Protected Areas; in order to enhance all aspects related to typical of a land (tradition, culture, health, authenticity, craftsmanship) succeeding thus to offer a response to economic development and small economies of protected areas.

The relationship between protected areas and farmers, as custodians of the undisputed land conservation, is vital because the landscape and environmental wealth of an area is closely linked to traditional agricultural activities in areas in which they are developed.

From the analysis conducted by administering questionnaires to sample of companies who participated in the process of animation for the promotion of Integrated Projects of Food Chain, come the following requirements:

- to promote and to encourage the development and testing of interventions for information, consultancy and training aimed at supporting agricultural enterprises and operators that are intended to experiment forms of aggregation and concentration of supply local production;
- to boost the incentive and the definition of good agricultural practices and environmentally sustainable production techniques in order to rehabilitate and develop the products that come from a protected area or adjacent areas;
- to provide effective training and updating activities aimed at improving professional skills related to agriculture (operators, technicians) on the basis of new economic opportunities given from the development of organic farming and local products of high quality and well from economic activities related

to sustainable development (host farm, rural sports, environmental guides, processing and marketing local products, etc..);

- to facilitate and to encourage communication activities about the market, referring to production techniques and the typical characteristics of products that come from a protected area;
- to use the financial opportunities and Pacts in the existing system of protected areas favoring market trends;
- to promote actions in support of the local driving sectors through the creation of new skills free (organic, non-farming activities and tourism, etc..) that are able to support change processes in place and to avoid marginalization of local agriculture that presents inadequate skills;
- to consider a park as a source of real economic opportunity, because the development of
  marginal areas can benefit enormously of proper and respectful use of environmental
  resources, making each other functional in order to carry out the objectives of
  economic and social growth through agriculture;
- to maintain the economic role of protected areas through assimilation to Local systems of environmental goods as part of financial planning for local development.

Agriculture plays the main strategic role in protected areas, because it is capable of offering goods to meet a growing demand for products with high content in environmental, healthy and quality. From this point of view protected areas suffer from a condition of poor promotion and support from locally and nationally economic and financial programming.

Therefore it needs to reverse this trend in the direction of greater exploitation of local resources.

Institutions located in protected area management, in that sense, play a strategic role, especially in relation to an increased ability to coordinate actions and instruments put in place in order to make more comprehensive and effective the development process and primarily it is the Park Board that assume the decisive role in programming, planning and management of the area. In this respect it also seems important the use of the development model of industrial districts in order to revitalize local development in protected areas. From this point of view, it is significant the work of the National Park of Pollino that defines development strategies regarding the opportunities arising from structural policies European Union 2007-2013 and developed by regions of Basilicata and Calabria. For this reason, it is also important to establish a partnership in support activities and technical assistance aimed to enhance the effects of intervention in favor of local populations and the Environment - as well as the birth of the Local Production System Pollino-Lagonegrese currently undergoing approval by the Basilicata Region.

In fact it seems important, encourage and enhance those prevailing socioeconomic systems of rural character, typical of the marginal areas inside, that they find the appropriate conditions for the development in its rural condition, guaranteed and protected by the actions of environmental protection. In this way, the economy of these areas would rely their bases in a relationship of mutual dependence between the different economic sectors (agriculture, tourism, services, etc.) and society.

These activities have ensured the maintenance of the area over time and they were key component for the Protection hydro-geological, they allowed the maintenance of infrastructure and thus the usability of the territory, they have handed down and observing cultures, knowledge, traditional products that are among the values most important of our region and those on which it points to build a better supply planning.

The multifunctionality of the agriculture is, therefore, the main strategy to be pursued for the recovery of agricultural land, including identifying foster care farms to important tasks and environmental protection, from one hand, in order to create alternative sources of incoming and thus improve the welfare of rural populations, from the other hand in order to promote sustainable development, care and maintenance of the rural environment, management and environmental protection and landscape enhancement of the special features products and the relationship between product and territory.

## **Conclusions**

Regarding the agro-food industry, there is a growing awareness that the forms of vertical coordination is an important strategic lever to cope with changes in a scenario of increasing competition, because of globalization, the rapid spread of new technologies, the huge changes in the structure of consumption of food, which, although declining in quantitative terms, are characterized by the demand for a greater variety of products and increased consumer expectations for quality, and changes taking place in institutional framework.

The quality and technological innovation become very important for vertical relationships, particularly in some areas, very much influenced by the relationship between raw material suppliers, processors and distributors. The necessity of developing long term relationships, according to well-defined sector strategies aimed at achieving common objectives in terms of value and competitive advantage, assumes, ultimately, particular emphasis for the agro-food business. This is especially true in a chain called "atypical" as that of the Pollino, where companies are very careful to pursue quality and distinction in terms of strategic positioning and where the link with the territory and with stakeholders in the agro-food local is much more important than in other cases, or in cases where the preferences and eating habits are moving increasingly from the simple nutritional needs to the increasingly request of products differentiated by quality, safety, information and the more value added content.

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