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# AN INCUBATOR MODEL BASED ON THE TERRITORIAL VALUE CHAIN

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**Abstract:** Policies to promote and encourage local foods may take many different shapes depending on both the specific targets and strategies. Some policies, especially at a local level, promote supply-chain vertical and horizontal integration as a comprehensive strategy which aims to help firms pursue several of the promoting policies. A business model that focuses its attention on the consumer of the product and territory can be a crucial driver in generating a 'land fecundation' as a response to globalization. The aim of the paper is to investigate the link between rural development and territorialisation, exploring the role of Local Action Groups Integrated Projects of Food Chain and Rural Development Programmes from 2007-2013 in a region in Southern Italy. The article makes use of a value chain approach, starting with Porter's value chain model and five forces model of competition; it proposes a methodological framework for the development of an organisational model that includes and builds networks between the several stakeholders and local programmes, creating a shared strategy to revitalising the area and the food choices of its residents. This revitalising process takes place through the implementation of a multi-purpose incubator establishing strong partnerships that are able to foster complementarities among all rural stakeholders. Conclusions and implications for policy makers are drawn: a model of territorial organisation could link territorial capital and local stakeholders, and therefore the programming carried out under the entire RDP.

**Key words:** rural development, territorial capital, incubator

## Literature review

Some policies may foster community-supported agriculture, while others focus on the influence of food processors and retailers on food chain, market-certification of location, direct-to-consumer marketing channels, information policies; others are eager to emphasise the efficiency of the production functions of local food systems.

The definition of possible growth strategies for each territory must necessarily rely on local resources and on their 'territorial capital' (Camagni and Capello 2008; Melachroinos and Spence 2013; Perucca 2013) and social capital (Lin 2001; Lippert and Spagnolo 2006). The term 'territorial capital' was proposed for the first time in the context of regional policy by the OECD (2001), which has developed a structured list of factors acting as determinants of territorial capital and material goods ranging from traditional to newer assets. These factors may include the geographic location, traditions, natu-

ral resources, quality of life or agglomeration economies, but may also include incubators or other business networks that reduce transaction costs. Other factors may be 'non-commercial interdependencies, such as local knowledge, customs and informal rules that enable economic actors to work together in conditions of uncertainty, solidarity, mutual assistance and co-operation of the ideas (OECD 2001). According to Marshall, there is an intangible factor called the 'environment', the result of a combination of institutions, rules, practices, producers, researchers and policy makers that allow a certain degree of creativity and innovation (OECD, 1998). In addition, the EU Commission said that regional development policies should help areas to develop their specific territorial capital as soon as possible (European Commission, 2010). The concept of territorial capital has made its appearance outside of a strictly scientific field. The theoretical literature of endogenous development has long drawn the attention of scholars on regional intangible assets such as atmosphere, synergy and

management of local factors. Such elements over the last decade have been interpreted in the form of share capital (Colemann 1990; Putnam 2003), relational capital (Camagni and Capello 2002) or, in a slightly different context, as a wealth of knowledge (Foray, 2000; Storper, 2003), human capital (Capitanio *et al.* 2010; Galindo-Pérez-de-Azpillaga *et al.* 2013; Paci and Marrocu 2013; Servillo *et al.* 2012). The role assigned to the territory changed from being considered as a source of environmental tools for the development of enterprises to being seen for the role it has in the process of the construction of knowledge, cooperation models and decision-making. The territory then becomes a complex of socio-economic relations that form the relational capital or social capital (Putnam, 2003), an area which is bound geographically, and 'a system of local governance', which combines a community, a group of private actors and a system of local public administration (Camagni and Capello, 2002). Scott (2001) states that globalisation is not a situation of 'data' in the world, but rather a process in motion, generated by the opening of markets, new trends to locate businesses, technologies and information. Thus, there is an essential relationship between social capital and the natural capital of a territory. It would be a mistake to dwell closely on resources, but it is useful to consider the ability of the individual to preserve the environment, utilising it in a sustainable way (Perman, 1996). This approach to territorial capital is based specifically on the theory of milieu innovateur, a result of innovative processes, synergies, relationships, human aspects, resources, knowledge and local development (Camagni 1995; UNDP 1990; 1997). The elements that constitute the '*milieu innovateur*' can be summarised in close geographic and socio-cultural proximity; the relational component of the territorial capital is composed of cooperation, trust, cohesion and sense of belonging (Lin, 2001). Therefore, the value that is obtained by combining capital, relational capital, cohesion and cooperation among the actors of local development, is the added value of both territorial development and territorial capital.

## Rural development and territorialisation

The concept and experiences of rural development, based on the attempt to increase the competitiveness of the agricultural sector and stimulate the development and enhancement of a territory are key themes in the European Union and constitute a major part of alternative forms of endogenous development that have tested in the last twenty years. Within the Structural Funds reform and the adoption of the objective of social, economic and territorial cohesion, the European Commission has identified the concepts of partnership and programming as central in new policy for local development, based on the formation of partnerships made up of local, economic, social and institutional stakeholders. The Integrated Projects of Food Chains (IPFs) represent a set of coordinated and organic operations related to several measures of the Rural Development Programme (RDP); an aggregation of individuals operating in different segments of a given food supply chain accessing the RDP through the presentation of an appli-

cation proposed by an individual leader. The initiative should therefore provide for a plurality of participants linked by constraints of contractual nature that highlight the obligations and mutual responsibilities in the accomplishment of the whole project, in order to fulfill certain goals. The implementation of IPFs can make a decisive contribution to the improvement of competitiveness of important Italian agro-food sectors. The range of the IPFs includes the agriculture, forestry and agro-industrial sectors to be geographically localised in the entire region. The regional call aims at promoting and reinforcing the integrated approach and the aggregation and cooperation among the different parties of the chain (from production to marketing), in order to promote and strengthen the partnership praxis, to increase the value of the sector and the competitiveness of the enterprises involved, and to promote the typical products of the territory, thus helping to create social capital (Contò *et al.* 2011). The focus on multiple subjects of programming (economic and social partners and any other appropriate social organism), identified on the basis of the criteria of complementarities and partnerships, became the key component. Within EU Leader + pursuant to art. 62-61 of EC Regulation No. 1698/2005, a partnered local development approach shall be implemented by Local Action Groups (LAGs); the Leader approach is characterised especially by the concept of multi-sector strategy, based on the interaction between parties and projects of different sectors of the local economy and on the implementation of innovative approaches, projects cooperation, and networking of local partnerships. The LAGs, therefore, are the main parties of a bottom-up planning process which has the task of working out the development strategy and is composed of both private and public partners, thus gathering a balanced and representative set of the different socio-economic local stakeholders. Each LAG is, in short, a programming tool representing the various socio-economic sectors and bringing together all potential public and private parties of the development process in order to define a planned policy (Contò *et al.*, 2012a and 2012b).

## The territorial social capital and the analysis of stakeholders: the case of Apulia Region

The principle of "territorialisation" dictated by the EU for the implementation of the RDP 2007-2013 in Apulia has generated, over recent years, a programmatic fragmentation with reference only to the agri-food sector and rural areas. In 2009, the Apulia Regional Government has recognised 25 LAGs whose actions involve almost entirely, at least for inland areas, the regional territory. Apulia is a region where the Italian agro-food sector is prosperous. In 2011, Apulia approved and funded 42 out of the 64 projects which were submitted. The highest number of IPFs was registered in the Horticultural chains with 12 projects approved; 7 projects for the Cereal and the Wine supply chain; 6 for the Dairy chain; 4 for the Olive oil chain; 5 projects for the Livestock supply chain; and just one project for the Forestry supply chain. A programmatic fragmentation of the

local development strategies clearly emerge, relentlessly opposed to the need for a harmonious development of the regional economy. Therefore, with regard to rural development, it is crucial to achieve a unique organisational model, so as to harmonize local planning and to compete within the globalised markets that dominate the food system. The principle of territorialisation of regional interventions can represent a relevant opportunity for the implementation of development strategies and can pave the way for transnational and interregional programs, which are essential in fostering the development of relationships and networks. In order to plan a harmonious development of the regional economy starting from the local specificities, it is crucial to define a synergistic model of the territorial organisation of rural development in which the LAGs and the IPFs are called to work according to the logic of integration and overcoming the territorial boundaries, in favour of the development of production chains and territories. Social capital is not only a set of norms and informal rules, but also of networks that enable cooperation, trust, and collective action for the common good. Social capital does not arise in an instant. It is a product of social (multi-agent) interaction (Yiheyis et al. 2007). Therefore, these social capital variables could act as important predicting factors in determining the adoption and utilisation of RDPs programs (Firouzjaie et al. 2007) in an efficient way. As can be seen in Table 1, both the IPFs and the LAGs involve local stakeholders and represent the legal instruments capable of aggregation at the local level, but are especially useful in defining and developing the social capital of a given geographical area or production system. Hence, the need arises to define an organisational model at the local level, connecting all the programming of the RDP and networking territorial capital.

Table 1. Social capital in LAGs and IPFs. Source: own processing

Stakeholders	LAGs	IPFs	Stakeholders	LAGs	IPFs
Municipalities and Province	x		Consortia	x	x
Public Bodies	x	x	Associations	x	x
Firms	x	x	Universities	x	x
Cultural associations	x		Banks	x	x
Primary Cooperatives	x	x	Training centers	x	x
No-profit Cooperatives	x		Others	x	x

Here we refer to Porter’s models, inserting further territorial capital implications. Value chain analysis (Porter 1985) describes the actions within and around an organisation, and relates them to an analysis of the competitive strength of the organisation. Thus, value chain analysis evaluates the value that each particular activity adds to the organisation’s products or services. Porter’s scheme highlights that an organisation is more than a casual collection of machines, equip-

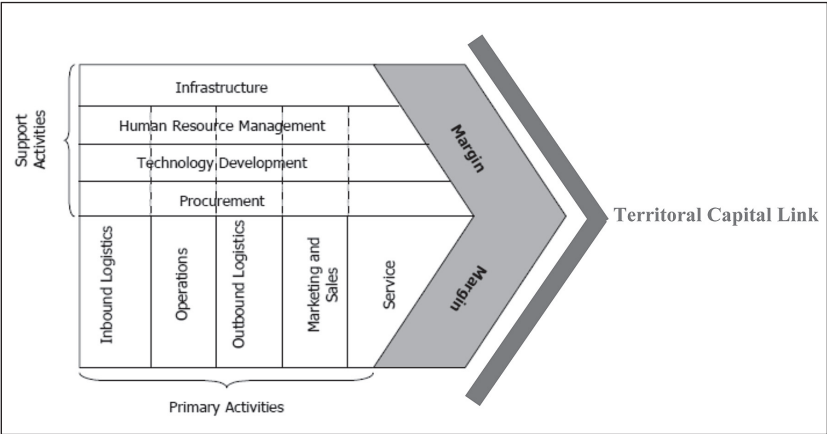


Figure 1. Porter’s value chain template. Source: own processing based on Porter’s (1985) model

ment, people and money that produce something for which customers are willing to pay a price only if an arrangement into systems exists: performing particular activities and managing the linkages between several activities are a source of competitive advantage. In order to consolidate and entrench this competitive advantage, territorial capital can be a crucial tool for generating a ‘land fecundation’ as a response to global competition (Fig. 1). In this new template, “Margin” implies that organisations realise a profit margin not only caused by their ability to manage the linkages between all activities in the value chain, but also due to territorial capital that reduces uncertainty in decision-making and innovation processes and facilitates collective action via ex-ante coordination. In other words, the strong link to territory and thus to its capital/needs enables an organisation to deliver a product/service for which the customer is willing to pay more than the sum of the costs of all activities in the value chain.

In Porter’s (1979) competitive model too, there are two strategic objectives: creating effective links with customers and suppliers and creating barriers to new entrants and substitute products. The creation of a substrate linked to the territorial/institutional capital is added (Fig. 2) and is crucial in order to reach the first two objectives. Awareness of linked territory adjunctive competitive forces can help a company stake out a position in its industry that is less vulnerable to attack (Porter, 1979).

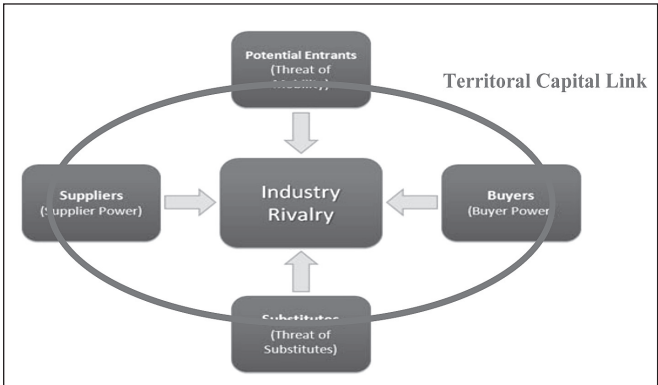


Figure 2. Porter’s Five Forces Model. Source: Own processing based on Porter’s (1979) model



## An organisational model for the development of rural areas: the multi-purpose incubator

In order to increase the competitive advantage of the area, it is essential to promote regional development models capable of organising integrated participation of stakeholders in strategic decision-making. According to this logic, we implement an incubator model of territorial capital (Irianto, 2011). It is an organisational model conceived as physical and telematic space, useful in promoting the establishment and development of the territorial capital of a rural area able to directly involve local stakeholders; the latter are the protagonists of implementation processes of the RDP about processes of rural governance and consultation of programming choices for the period 2014–2020. It is therefore a model of agency for rural development, combining the operational objectives of the IPFs and LAGs operating in a specific regional area and generating local value – and thus competitive advantage of the region – from a combination of decisions and the related activities of local stakeholders. The incubator capital creates connections between economic, social and cultural rights and promotes joint stake actions using the entrepreneurial drive as a lever for innovation and regional development. The incubator can be depicted as a multi-purpose centre where the following laboratories are: Services, Demonstration, Communication, and Documentary, Education and Training.

The *Services Laboratory* is functional to organisation service activities, payable either door to door and via the web, such as technical advice to businesses, information sessions and transfer of specific know-how. The Laboratory is designed as a control room of predominantly technical management processes, which help to strengthen companies, and provide solutions and continuous improvement processes. The main activities are related to:

- **Operative management room** of supply chains to cope with all the chain limitations and operational management. The establishment of support services will be a crucial driver for growth of companies and of territory. The interaction should favour the supplier-customer relationships between leading companies and the transformation of the territory, the use of ancillary services and the adoption of common standards for efficiency and economy to confer the management of companies, for more help to characterise the land and its productive vocation. These procedures will be used to define the functional specification of a software platform that supports a processing point of view, the operation and management of the supply chains themselves, introducing tools for e-consulting, solutions for traceability throughout the supply chain and an electronic logbook.
- **The evaluation and certification of quality products** supports pathways to improve the quality of production, to be pursued through reengineering processes, and promotes the aggregation of local producers and routes to raising the level of product quality through the achievement and maintenance of voluntary certification, based on specifications approved by third parties and registered trademarks

that correlate productions and territory of origin. The laboratory is a place of synthesis between technology and tradition, using the former to read, interpret and transfer the latter, favouring innovation in processes and production systems.

- **Coordination for the management and expansion of educational and multi-functional farms** for networking activities developed by the Leader, funded by the LAGs. In this context, the Laboratory services will be responsible for activities which train those involved in running farms to become multifunctional farms and for involvement of other interested parties in various ways, such as universities and public and/or private research centres. Furthermore, it will promote and animate a network of multifunctional farms in the area in order to facilitate the exchange of experiences.
- **Station for the dissemination of innovative methods and techniques for the treatment of waste in agriculture and the use of alternative energy sources:** for testing environment and agro-energy solutions on a pilot scale, providing guidance technologies to solve and reduce environmental impact and to integrate farm incomes. Hence the need to establish the effective raising of awareness aimed at both operators and public authorities having jurisdiction in this area, and also in order to foster a connection between the various stakeholders including companies, public administrations and public research organisations and/or individuals.

The fundamental goal of the *Demonstration Laboratory* is commercial and promotional in terms of agricultural food production, craft, cultural and environmental tourism pursued through the direct involvement of companies producing and processing the catering industry, sommelier, and so on. The main activities are: marketing strategies and specific marketing channels, especially in conjunction with cultural events and holidays; permanent exhibition and sale of food, crafts and cultural tourism; area for wine tasting and space in which temporary pilot models of technological solutions can be proposed to the territory, regarding issues related to the treatment of waste, the generation of energy from renewable alternatives, and providing the opportunity for farmers to benefit from audio and video multimedia.

The *Laboratory of Communication*, together with the activities of the *Demonstration Laboratory* must plan and implement activities such as drafting editorial productions of traditional and multimedia tools related to the activities of the supply chain and the region and territorial portal web management.

The *Documentary, Training and Educational Laboratory*, finally, has the function of carrying out training, optical storage and document scanning for businesses. In particular, coordinating the activities of various stakeholders already involved in local activities developed within the IPFs and LAGs, the laboratory should address the following areas: Dietary education and nutritional quality; Training new skills; Paths of development and enhancement of integrated land resources; Innovation and knowledge transfer. This last aspect, developed in partnership between the production system and the research

system, becomes a driving force for the growth of social capital and the diffusion of knowledge.

## Conclusions

The present research work intended to define a prototype model of the organisation of local rural development, based on theories of territorial capital, and on the ability of an area as a whole to acquire a competitive advantage, as the result of the interactions of the various stakeholders involved in the programming tools. Our analysis, carried out in a region in Southern Italy, has clarified that both the IPFs and LAGs often involve the same stakeholders in defining strategies of territorialisation of the interventions provided by the RDP. For this reason, the organisation of these stakeholders' participation in the processes of defining the decisions and their implementation at the local level allows the territory to do the following: optimize the processes of developing the competitiveness of the multifunctionality of regional and local in-progress agriculture; generate effective processes of land management and plan measures prior to the 2014-2020 programming period; and strengthen the territorial capital. Finally, this paper defined an incubator model, adapting Porter's value chain model and five forces model of competition by inserting territorial capital implications. The strong link to territory and thus to its capital/needs enables an organisation to deliver a product/service for which the customer is willing to pay more than the sum of the costs of all activities in the value chain. In this context, therefore, a prototype model of territorial organisation has been defined, capable of networking and linking territorial capital and local stakeholders and, therefore, the programming carried out under the entire RDP. Configured as above, the incubator model could have the ability to generate and drive the processes of local development through the strengthening of the capital of the territory.

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