
The Metadistrict as the Territorial Strategy: From Set Theory and a Matrix Organization Model Hypothesis

Francesco Contò¹, Mariantoinetta Fiore¹, and Piermichele La Sala²

*1*University of Foggia, Italy *2* University of Basilicata, Italy
f.conto@unifg.it, m.fiore@unifg.it, plasala@yahoo.it

Received January 2012, accepted July 2012, available online October 2012

ABSTRACT

The purpose of this proposal is to explore a new concept of 'Metadistrict' to be applied in a region of Southern Italy – Apulia - in order to analyze the impact that the activation of a special network between different sector chains and several integrated projects may have for revitalizing the local economy; an important role is assigned to the network of relationships and so to the social capital. The Metadistrict model stems from the Local Action Groups and the Integrated Projects of Food Chain frameworks. It may represent a crucial driver of the rural economy through the realization of sector circuits connected to the concept of multi-functionality in agriculture, that is Network of the Territorial Multi-functionality. It was formalized by making use of a set of theories and of a Matrix Organization Model. The adoption of the Metadistrict perspective as the territorial strategy may play a key role to revitalize the primary sector, through the increase of economic and productive opportunities due to the implementation of a common and shared strategy and organization.

Keywords: Network; Local Action Group; Food Chain; Agro-food District

1 Introduction

The serious national and international economic problems, caused by the ongoing crisis of the primary sector have recently highlighted the importance of the linkages among firms and sectors (Gellynck and Kuhne, 2010; Antonelli, 2010), in order to segment the problems by sharing a common strategy. For this reason, our paper starts from the creation and analysis of a new concept of 'Metadistrict', by taking into account the Agro District, the Local Action Groups (LAGs), and the Integrated Projects of Food Chain (IPFs)*. The Metadistrict may actively represent a crucial driver of the economy and can contribute to the improvement of the quality of life in Apulia, especially through the shared action of different stakeholders aimed at discovering and stimulating the innovative multi-functional activities that could exploit the territory. The present paper is divided as follows: paragraph 2 is a literature review; paragraph 3, after having described and explored the law and economic essence of the Districts, the IPFs and the LAGs, it analyses and identifies those ones related to Apulia Region; paragraph 4, starting from the existing Metadistrict models, outlines the concept of Metadistrict as key role for the territorial strategy and defines our new concept of Metadistrict making use of set theory and of a Matrix Organization Model. Finally, paragraph 5 draws the conclusions and proposes some policy indications

* They are organizational and territorial frameworks adopted by the Rural Development Programs - RDP 2007/2013 – that plans to earmark for IPFs a high percentage of available financial resources.

2 A literature review

The firm is not a separate unit but can be conceived, studied and analyzed only as a piece of a puzzle that configures the socio-economic and geographical context and, above all, the network of relationships that links it primarily to the territory and to its stakeholders, and *in secundis* to customers, suppliers (and subcontractors), external consultants, and connected and associated businesses, at different levels of competition.

In fact, the EU and international institutions (like the OECD, the World Bank, UNESCO) perspective is to integrate the relationships among firms with the context in which these relationships are formed and developed, thus highlighting the cooperation between different social and political parties and the relevance of local partnerships (UE, 2001; 2003; 2005). The models based on networks of organizations hinge primarily on cultural, social, relational capital, and, on a specific involvement of local public institutions[†]. The phenomena of relocation of production, internationalization of enterprises, transnational business networks, have led to interpret the "space" not as a source of cost, but as a development factor, in a perspective of hierarchy and networks between areas. The EU policies in agriculture and rural regions are, in fact, experiencing a "re-localization", with the passage of more and more powers to local institutions from EU institutions, devolving to the Member States and the institutions a greater local autonomy in setting objectives, managing and financing the operations, implementing specific interventions.

The cooperation and commitment of all relevant stakeholders from the early stages of preparation, implementation and support from both central and local government levels are fundamental for the achievement of the Rural Agribusiness Development (RAD) programmes objectives (Irianto, 2011), that is as a participatory mother/baby approach through a regional network of dialogue and exchange platforms among all the stakeholders along the value chain (Nkapnang Djossi et Al., 2010). The rural entrepreneurship depends in special way on the building of strong partnerships that foster complementarities, setting specific targets that empower all rural stakeholders (Traore and Bickersteth, 2011) and structuring a better link between the formal and the informal systems (Okry et Al., 2011); this link would help to formulate a chain strategy and organization (Baars and Riediger, 2010). In this sense, the establishment of Networks of Clusters of Innovation (NCOI) are partnerships and agreements between individuals and institutions that belong to geographically distant Clusters of Innovation (COI). The driving force of these cluster networks is to connect mobile resources, individuals, universities, research centers, associations, organizations that are globally oriented. The basic elements of NCOI are individuals, firms and relations between them supported by formal and informal networks of contacts that often start as professional and unofficial meetings of affinity groups and then sometimes evolve in major trade associations (Engel and Itxaso del-Palacio, 2009).

The network structure reveals how architecture among firms evolves at the macro level but requires a micro-organizational analysis (Gavetti, 2005). Finally, a good integrated chain management practice can be a strategy to achieve higher levels of performance (there are several hybrid forms of economic organization) based on a business-to-business relationship which evolves among supply chain stakeholders when attempting to link farmers to markets (Cadilhon et Al., 2009). An example is the Vegetable Science International Network (VEGINET) established by the General Assembly of the Conference ICV-2002 whose main goal is to strengthen partnership and inter-institutional cooperation among the member organizations of the sector by disseminating information among the member organizations (Nath, 2007). In this framework, a crucial role is assigned to 'relational capital'. Both the new cognitive resources become available, such as information and trust, thus allowing the actors to achieve unattainable goals (Lippert Spagnolo, 2006, Gintis and Khurana, 2007; Aoki, 2007) and the local social capital to promote and to implement activities in local communities by planning processes aimed at increasing the value of resources (Helfat et al. 2007, 2010). The integrated approach and the aggregation and cooperation among the different programs stakeholders are the main factors to increase the value added and the competitiveness of the rural sector consequently serving to generate social capital (Alfano et Al. 2008). The role of social networks and social capital determining the success of locally rooted productive organizations, which adopt organic agriculture, has also been investigated showing a positive relationship (Kroma, 2006). To operate in an evolving market, as a source of many opportunities but also of new risks, we need tools such as training, counseling, community life and we should be member of a

[†] For example, firms that link their networks of suppliers, franchisees and their retail stores are an instructive example of how a dual network integrates two sub-asymmetric networks. Such networks have internal mechanisms and competencies that require both a broad spectrum of communication skills with external parties and a strong coordination capacity within the organization that orchestrates and manages the two networks (Lorenzoni, 2010).

network (Contò et Al., 2011) and the social capital reflects the ability of community members to participate, cooperate, organize and interact (Heilbrunn, 2005). Social capital is not only a set of norms and informal rules but 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 thus determining the adoption and utilization of RDPs programs (Firouzjaie et Al., 2007) in an efficient way.

3 The IPFs, the LAGs and the districts

The IPF

The chain integrated project represents 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 access the RDP through the presentation of an application proposed by an individual leader. The initiative should provide, therefore, 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 chain integrated project can make a decisive contribution to the improvement of competitiveness of important Italian agro-food sectors. The range of the Integrated Supply Chain projects regards the agriculture, forestry and agro-industrial sectors to be geographically localized on the entire region. The Regional Call for submission of IPFs was founded to pursue, through the Integrated Supply Chain Planning, a series of specific objectives.

In particular, the 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); the aim is to promote and strengthen the partnership praxis, to increase the value added of the sector and the competitiveness of the enterprises involved, to promote the typical products of the territory thus helping to create social capital (Alfano et Al., 2008; Zumpano, 2007; Deidda, 2003).

The Districts

The word "districts" as a legal concept was introduced by the Italian law 317 of October 5, 1991, on "Measures for the innovation and the development of small businesses". It stated a formal definition of "industrial districts" and provided a comprehensive framework with which the regions were assigned the task of identifying the district areas, and Consortia of industrial development, government-owned businesses, and providing them with real business services. With the delegated law in agriculture, no. 57/01, the Italian legislator assigned the task of promoting, through the method of consultation, support and social and economic development of agriculture, aquaculture, fisheries and agri-food systems according to the productive potentialities of the territory. This would allow to identify the conditions for the establishment of agro-industrial, rural and fishery quality and ensuring the protection of natural resources, biodiversity, cultural heritage and the agricultural landscape and forestry (Article 7, the law cited above). Agriculture and land, in the law of orientation, have to find a shared territorial dimension, in the respects of productive vocations, and taking into account all aspects in their natural and human perspectives of sustainability (Rook Basile, 2001; Sassi, 2008). With the last Rural Development Regulation, no 1698 of 2005, 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. Other than pursuing a relationship between the CAP and the rural development enhancing diversity and autonomy, the Regulation requires both "complementarity, consistency and compliance" (Article 5 reg.1698/2005) and responsibilities.

The LAGs

Within EU Leader + programme, pursuant to art. 62 of EC Regulation No 1698/2005, partnered local development approach shall be implemented by Local Action Groups (LAGs), and therefore, subjects IV Axis Actuators are represented by the LAGs. Under Art. 61 of Regulation (EC) 1698/2005, the Leader approach is characterized especially by the concept of multi-sector strategy. This strategy is based on the interaction between parties and projects of different sectors of the local economy and on the implementation of innovative approaches, projects cooperation, networking of local partnerships. Consequently, these elements are the general requirements for programming tools (LAG-PSL). The LAGs, therefore, are the main parties of a bottom-up planning, they have the task of working out the development strategy, and they are responsible for its accomplishment. The LAGs are 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 that brings together all potential public and private parties of the development process

(such as trade unions, business associations, businesses, municipalities, etc..) in the definition of a planned policy.

3.1 The case of Apulia Region

The principle of territorialisation dictated by the EU for the implementation of the Regional Rural Development Programmes (RDP) 2007/2013 in Apulia has generated, in the recent years, a programmatic fragmentation with reference only to the agri-food sector and rural areas, resulting in 2 industrial Districts, 25 LAGs and 7 food chains connected to 45 Integrated Projects of Food Chain approved and funded by the Apulia Region in 2011.

The “Federiciane Lands” Agro-Food Quality District, established in 2009, includes more than 767 farms (producing mainly tomatoes, olive oil and wine, fruit and vegetables, and wheat) and agricultural products processing plants (eg. vegetable canning, vegetable packaging, milling and dairy industry) in the provinces of Bari, Barletta-Andria-Trani (BAT) and Foggia.

The “Ionian-Salento” Agro-Food Quality District includes 196 companies in the provinces of Taranto, Brindisi and Lecce. Development programs in both districts aimed primarily at improving competitiveness, internationalization and efficiency of agriculture and food industry through: 1) valorization of production with quality and denomination of origin and quality labels and certifications, such as PDO, PGI and "Organic Farming", 2) business consulting services, 3) strengthening of the logistics, 4) improvement of credit access, 5) modernization and rationalization, 6) promotion of research and innovation, 7) training and implementation of district governance through new relationships among development stakeholders[‡]. In this sense, the Agro-Food Apulia districts develop such networks of enterprises linked together per chains or productive sectors. Among the institutions stand out, especially universities and research centers (as well as organizations, consortia, associations and labor unions) that, working with the firms, produce innovation thus raising the competitiveness of the productive Apulian framework[§].

It is apparent, however, in the two districts, the absence of the ability to structure and implement the identified program guidelines and to allow (for example through the establishment of regional service centers), the fulfillment of a wide range of business services in order to foster firm competitiveness, as well as appropriate policies for local marketing. Most of this lack of intervention can be addressed to the limitations of regional legislation on the subject (LR 23/2007), although political and structural components should be deepened to reach a complete explanation. In 2009, following submission of the Local Development Plans (LDP) calls, (as provided by the Leader Axis of the RDP 2007/2013), the Apulia Regional Government has recognized 25 LAGs (figure 1) whose actions involve almost entirely, at least for inland areas, the regional territory (table 1).



Figure 1.The 25 Local Action Group of Apulia Region

[‡] Among the most interesting targets is also the enrichment of the logic of the district with the enhancement of cultural, agritourism and enogastronomic resources on the existing land.

[§] To this end, the two districts are joined by the DARE (Food Regional District), the interface for the technologic transfer of Puglia research system towards the agri-food system, consisting of 60 public and private stakeholders among the most representative of the regional research as well as companies operating in agriculture and food processing, manufacturing, services and financial sectors.

Table 1.
The Local Action Group recognized in Apulia in 2011

NAME	HEAD OFFICE	PROVINCE	MUNICIP.	POPULATION	SQ.KM.
LAG Alto Salento	Ostuni	Brindisi	7	142.278	715,00
LAG Capo Santa Maria di Leuca	Tricase	Lecce	18	112.614	433,90
LAG Colline Joniche	Grottaglie	Taranto	11	110.657	415,00
LAG Conca Barese	Bitetto	Bari	9	101.685	478,23
LAG Daunia Rurale	San Severo	Foggia	8	107.544	1.220,01
LAG Daunofantino	Manfredonia	Foggia	4	89.724	81,49
LAG Fior d'Olivi	Terlizzi	Bari	3	104.327	284,83
LAG Gargano	M. Sant'Angelo	Foggia	13	89.724	170,56
LAG Isola Salento	Vernole	Lecce	23	115.019	443,68
LAG Le città di Castel Monte	Andria	BAT	2	145.184	575,55
LAG Luoghi del Mito	Mottola	Taranto	6	126.336	1.035,87
LAG Meridaunia	Bovino	Foggia	30	98.000	2.274,73
LAG Murgia Più	Spinazzola	BAT	6	119.404	1.234,02
LAG Piana del Tavoliere	Cerignola	Foggia	6	92.835	826,00
LAG Ponte Lama	Bisceglie	BAT	2	104.857	170,56
LAG Serre Salentine	Racale	Lecce	14	89.724	81,49
LAG Sud Est Barese	Mola di Bari	Bari	6	132.962	480,41
LAG Terra d'Arneo	Veglie	Lecce	9	126.903	558,60
LAG Terra dei Messapi	Mesagne	Brindisi	8	123.483	558,63
LAG Terra dei Trulli e di Barsento	Alberobello	Bari	7	123.017	81,49
LAG Terra d'Otranto	Otranto	Lecce	24	97.931	508,42
LAG Terre del Primitivo	Manduria	Taranto	11	125.428	640,10
LAG Terre di Murgia	Altamura	Bari	2	90.217	571,17
LAG Valle della Cupa	Trepuzzi	Lecce	12	117.934	241,80
LAG Valle d'Itria	Locorotondo	Bari	3	75.606	397,00

Source: our processing on data by Apulia Region and the National Rural Network (2010)

The 25 selected groups represent an equal public-private partnerships, formed by the main public and institutional, economic and productive, cultural, environmental and social components operating within the geographical areas identified by its LDP. The LAGs will be entrusted with the task of planning and activating, through specific calls, the priority actions identified for each individual areas with the RDP objectives. In 2011, beside the parties oriented to rural development, new legal stakeholders were added. However, they acted on the regional PSR Axis I, represented by the chain partnerships. Apulia is a region where the Italian agro-food sector is prosperous, thanks also to a number of firms exceeding 94 thousands units, and it provides job opportunities to more than 132 thousands employees. Apulia, with the development strategy referred to the seven productive sectors identified by the Regional Government, has approved up and funding 42 projects in 2011 (Regione Puglia, 2010a, 2010b and 2010c; 2011) of 64 projects submitted. The highest number of IPFs was registered in the Horticultural supply chains with 12 projects approved; 7 projects for the Cereal supply chain and the Wine supply chain; 6 for the Dairy supply chain; 4 for the Olive oil supply chain; 5 projects for the Livestock supply chain; just one project for the Forestry supply chain (Table 2).

Table 2.
The Integrated Supply Chain projects approved and funded by the Region of Apulia in 2011

CEREAL CHAIN	APPROVED	DAIRY CHAIN	APPROVED
P.I.F. CEREALICOLO SILVIUM	YES	FILIERA LATTIERO-CASEARIA PUGLIESE DEI TRULLI	YES
P.I.F. CEREALICOLO PEUCETIA	YES	LATTE DELLA MURGIA DEI TRULLI	YES
PRO DOP ALTAMURA	YES	FILIERA LATTIERO-CASEARIA PUGLIESE GRANAROLO	YES
ORITALIA	YES	LATTE AMICO	YES
FILIERA CEREALICOLA PUGLIESE DEL TAVOLIERE	YES	FILIERA LATTIERO-CASEARIA PUGLIESE MURGIA BARESE	YES
FILIERA CEREALICOLA LEGACOOOP	YES	FILIERA LATTIERO-CASEARIA PUGLIESE COLLINE JONICHE	YES
CEREAL QUALITY	YES	FILIERA LATTIERO-CASEARIA PUGLIESE DELLA CAPITANATA	NO
CERERE	NO	FILIERA LATTIERO-CASEARIA PUGLIESE DELLE MURGE E DELLE GRAVINE	NO
FILIERA CEREALICOLA CONCOR	NO	FILIERA BUFALINA PUGLIESE DELLA DAUNIA	NO
FILIERA CEREALICOLA PUGLIESE DELLA MURGIA	NO		
FILIERA CEREALICOLA PUGLIESE DELLA CAPITANATA	NO		
OLIV OIL CHAIN	APPROVED	LIVESTOCK CHAIN	APPROVED
APROL	YES	VAL. FIL. AVI. - VALORIZZAZIONE DELLA FILIERA AVICOLA pugliese	YES
FILIERA OLIVICOLO 100% PUGLIESE JONICO – SALENTINA	YES	FILIERA ZOOTECNICA DA CARNE PUGLIESE DEL SALENTO	YES
APROLIO	YES	FILIERA CARNE PUGLIESE DELLE GRAVINE	YES
FILIERA OLIVICOLO 100% PUGLIESE FEDERICIANA	YES	GESTIONE INTEGRATA E VALORIZZAZIONE DELLA FILIERA DELLA CARNE BOVINA IN PUGLIA	YES
OLIO TERRA DI BARI	NO	INTEGRAZIONE VERTICALE ED ORIZZONTALE DELLA FILIERA AVICOLA PER LA PRODUZIONE DI POLLI ALLEVATI ALL'APERTO "IL CAMPESE"	YES
L'OGLIAROLA	NO		
OLEOPUGLIA	NO		
HORTICULTURAL CHAIN	APPROVED	WINE CHAIN	APPROVED
CILIEGIA E ORTOFRUTTA TIPICA	YES	VINI DOC CASTEL DEL MONTE	YES
FILIERA ORTOFRUTTICOLA L'ECCELLENZA DELLA FRUTTA PUGLIESE	YES	AL CUORE DEL PRIMITIVO	YES
DELIZIE MEDITERRANEE	YES	FILIERA VITIVINICOLA PUGLIESE DEL NERO DI TROIA	YES
ORTAGGI E FRUTTA DI PUGLIA PRONTI IN TAVOLA. JENTU: UNA FILIERA PER INNOVARE E VALORIZZARE I PRODOTTI DI IV E V GAMMA.	YES	FILIERA VITIVINICOLA PUGLIESE DEL NEGROAMARO	YES
BEST FRUIT MANAGEMENT	YES	NORDWINE	YES
FILIERA ORTOFRUTTICOLA SALVI	YES	DUE PALME	YES
HORTICULTURAL CHAIN	APPROVED	WINE CHAIN	APPROVED
FILIERA ORTOFRUTTICOLA IL PANIERE DELLE CONSERVE	YES	ENOTRIA	YES
FILIERA ORTOFRUTTICOLA PUGLIESE DAL TERRITORIO	YES	VIGNETI & VINI DI PUGLIA	NO
FILIERA ORTOFRUTTICOLA FUTURAGRI-GIARDINETTO	YES	SUD WINE	NO
OLIVA E CARCIOFO DELLA DAUNIA	YES	FEUDI SAN MARZANO	NO
VALORIZZAZIONE DELLE PRODUZIONI ORTOFRUTTICOLE DI QUALITÀ DELLA PUGLIA	YES	BEST WINE	NO
FILIERA FUNGO CARDONCELLO	YES		
FILIERA ORTOFRUTTICOLA IL PANIERE ROSSO DI CAPITANATA	NO		

continuing Table 2

HORTICULTURAL CHAIN	APPROVED	FORESTRY CHAIN	APPROVED
FILIERA FLOROVIVAISTICA PUGLIESE	NO	ENERLAND LEGNO – ENERGIA	YES
ORTOFRUTTA APULIA TIPIC	NO	FORESTAMBIENTE	NO
PRO.FILO.	NO		
PROGETTO VERDE	NO		
FILIERA ORTOFRUTTICOLA PUGLIESE DELLA DAUNIA	NO		
ORTICOLI E CONSERVE DI PUGLIA	NO		

Source: our processing on Apulia Region data (2011)

From what previously explained, it clearly emerges a programmatic fragmentation of the local development strategies, relentlessly opposed to the need for a harmonious development of regional economy. Therefore, with regard to rural development, it is crucial to achieve a unique organizational model, so to reconcile local planning and to compete within the globalized markets that dominate the food system. The principle of territorialization of regional interventions can represent a relevant opportunity for the implementation of development strategies and to pave the way for transnational and interregional programs. These programs 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 synergic model of territorial organization of rural development in which the LAGs and the IFPs are called to work, according to the logic of the integration and of the overcoming of the territorial boundaries. This would support the development of production chains and territories. This means to cooperate at horizontal and vertical level; the 25 LAGS, the IPFs and the Districts in the Apulia region can find any points of contact in order to create a 'dialogue' among their programming from the early stages of preparation, implementation and support from both central and local government levels. The realization and success of the Rural Agribusiness Development (RAD) programs objectives (Irianto, 2011) could be based on this 'meeting' aiming to facilitate the horizontal and vertical flow of skills and information.

4 The Metadistrict: Essence and methodology for future analysis

The integrated network approach is recommended by the Community policies** (Lisbon strategy, Structural Programs Funds 2007/13, Opinions EESC), at national level and in some regions. The key driving forces of development to revitalize local production systems include philosophy of unity, competitiveness, technological innovation and research. A further step in the direction of the approach and of the reticular models of development based on the connection and sharing of common interests, is represented by the experience of the Vast Areas and Metadistricts, being the latter our starting point.

The Metadistrict, born as first experience in Lombardy region, can be defined an area characterized by high interaction between districts coinciding with municipalities, even far from each other, in which firms from the same supply chain (considered strategic), are concentrated.

Nowadays a virtuous example in this model is the Veneto region that contains six important examples: the Wood Furniture Metadistrict, the Veneto Cultural Heritage Metadistrict, the Bioenergy Metadistrict, the Digital Media Metadistrict, the Touristic Metadistrict, the Digital Media Metadistrict, the Mechatronics and Mechanical Innovative Technologies Metadistrict, the Logistic Metadistrict covering the whole fields of Veneto economy. In particular, we describe here two of these ones in order to understand the underlying philosophy of Metadistrict:

- The Veneto Cultural Heritage Metadistrict, recognized by the Veneto Region according to L. R. No 8/03 and No. 5/06, was born with the aim to support companies and to stimulate the development of the entire supply chain of cultural heritage (restoration, conservation and enhancement). This experience is presented as the only Metadistrict linked to the cultural heritage sector. The Metadistrict promotes and coordinates national and international projects, collaboration between firms and institutions, supporting research and experimentation and encouraging the exchange of know-how between science and business.

** Lately the concept of "network of networks" finds its way not just as a model of human and economic development but also cultural, across the different sectors: thus, for example, in the opinion of the Committee of the Regions (2002 / C 107/22), in the European Parliament Resolution (2006), in "Communication From The Commission to The Council And the European Parliament, in Europe's Competitiveness - Towards an Integrated Approach (2003).

- The Metadistrict Digital Media (MDM) is the first Italian Digital Media Cluster (as number of associated companies) and it is among the largest in Europe operating on highly innovative projects built with the aim to overcome the Venetian business fragmentation and, therefore, developing companies and the regional economy. The MDM experiments with new business models, promotes business incubation for start-ups, in liaison with the local incubators and venture capitalists, both nationally and internationally.

So the Metadistrict can be considered, therefore, a connection model, not yet widespread, whose objectives are mainly two: a) to organize, on a long term, an industrial context that performed profitably over the last few decades; b) to ensure greater competitiveness and the largest diffusion on the territory, in order to 'distribute' the beneficial effect of growth (Cretì and Bettoni, 2001).

In fact, some Italian regional policy makers have confronted the problem of how to support firms and networks of firms through the creation of strong, autonomous and specialised centres that spread information, increase the level of knowledge and the introduction of new skills within the whole local fabric (OECD, 2005). Talking about this need, a strategy could be to give a clear priority to direct provision of services instead of monetary incentives and subsidies to buy services and to highlight the importance of local actors and of their direct participation. Given that in local clusters, every structural change in organization must be accepted and practiced by many firms, new skills and services cannot be injected through commands, but must be diffused by means of consensus not only by experts. Clusters appropriate to high-tech sectors are likely to be spread over much greater geographical distances than those associated with traditional Italian industrial districts – called 'meta-districts' by planners in Lombardy. These changes suggest at least two fronts for action: a) the appropriate diffusion of new skills among the whole economic actors of the local system as well as b) the provision of services that are not yet available (at least at the right quality and in time) at the local level (OECD, 2005).

So the core of our paper starts from the creation and analysis of a new ideological concept of 'Metadistrict', taking into account the Agro Districts, the Local Action Groups and the Integrated Projects of Food Chain. The District aims at promoting and creating local networks among the vertical subjects and between them and the development transversal subjects (cities, banks, universities, service, professional classes, etc...); the LAG is a horizontal model of territorial organization of local development. The introduction of the IPF requires, indeed, the development of models able to interpret both the dynamics of vertical and horizontal coordination between agents, and the definition of the issues that most affect the ability of professionals to provide added value in exchange of the competitive advantage. In our case, Apulia Region, we have a complex and fragmented structure (see prg. 3.1) composed by 45 IPFs, 25 LAGs and 2 Districts. If we consider and analyze carefully this context we can see as the different supply chains are made objective, materialized, 'embodied' in IPFs (Fig. 2). Correlatively, the promotion of territory goes through the Districts (at macro level) and the LAGs (at micro level) that represent the attempt to both formalize and create an essential and crucial network of stakeholders (Fig. 3). In fact the different steps of the territorial marketing are based on connection among the several territorial actors that are the same stakeholders of the Districts and the LAGs

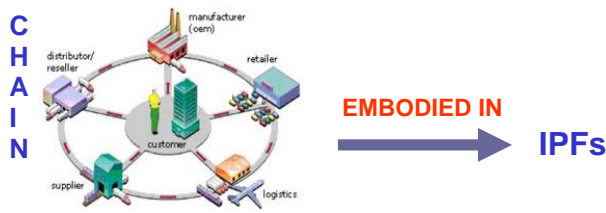


Figure 2. The chain embodied in IPFs
 Source: our elaboration

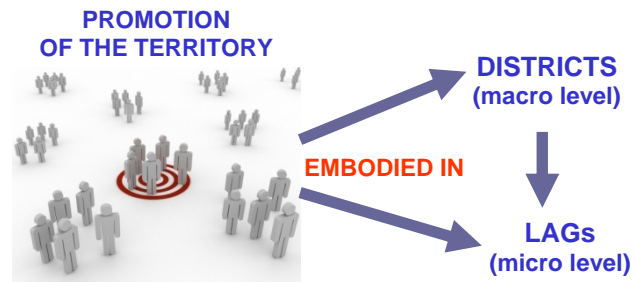


Figure 3. The promotion of territory embodied in District and LAG
 Source: our elaboration

We can get an area integrated policy by eliminating the fragmentation and creating a synergy between the actions of territorial marketing and the methodology of chain's relation activated for increasing productivity and improving the efficiency of and among different levels or chain's actors. If a chain works well, all the relationships among the participants will be efficient, the latter being the same territorial stakeholders that are relevant in the promotion of the territory. The quality and identity of territorial production - resulting from the strong link between firms and territory and from the social as well as economic value of agriculture - combined with the need to develop regional and interregional networks, are the main factors of integration and competitive advantage: it is the reason why it is possible to promote the realization of a Network of the Territorial Multi-functionality (NTM). There is, in fact, a new concept of 'rural' as interrelationship among agriculture and new international market, rural areas and landscape protection and social service economy. In this framework, the Metadistrict as territorial strategy deriving from the Districts, LAGs and the IPFs may play a key role for the economic development of the rural areas and for revitalizing the primary sector: in particular, the Metadistrict may represent a crucial driver of the economy and can actively contribute to the improvement of the quality of life in Apulia, especially through the shared action of different actors and stakeholders aimed at discovering and stimulating the innovative multi-functional activities for the protection and the best use of the territory.

Our starting point are the Agro-food Districts, the Local Action Groups and the Integrated Projects of Food Chain Development Programs. Assuming we divide the Apulia region into two areas coinciding with the areas of agri-food districts recognized by the Apulia Region, the Federiciane Lands Agro-Food Quality District (FD) and the Ionian-Salento Agro-Food Quality District (ID), we can highlight the overlapping of the programming of 2 agro-food Districts, of 45 IPFs and of the 25 LAGs. These Development Programs establish common objectives, activities and financial resources in relation to specific areas and territories. We attempted to formalize this panel composed by different and overlay programming by making use of a set of theories as follows:

$$\sum_{i=1}^N IPFs + \sum_{j=1}^M LAGs \subseteq \sum_{y=1}^P Ds$$

where:

i = 1.....45 that are the 45 IPFs Programs;

J = 1.....25 that are the 25 LAGs Programs;

y = 1..... 2 that are the 2 Districts Programs;

and so,

$\sum_{i=1}^N IPFs$ represent the Meta-IPF;

$\sum_{j=1}^M LAGs$ represent the Meta-LAG;

$\sum_{y=1}^P Ds$ represent the MetaDistrict.

The Euler-Venn diagram below (fig. 4) gives evidence of how the two Districts contain geographically and, therefore, at the level of programming the LAGs horizontally (12 in the Federiciane Lands Agro-Food Quality District; 12 in the Ionian-Salento Agro-Food Quality; 1 falls in both) and the IPFs vertically (whose supply chains firms fall in both districts).

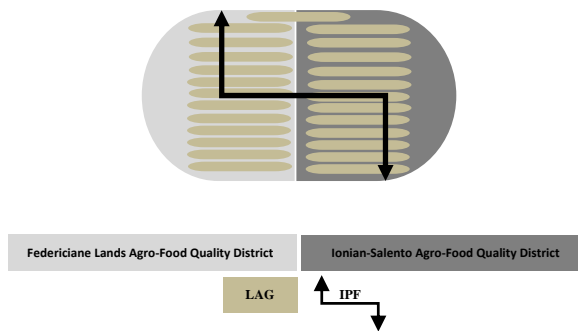


Figure 4. The Euler-Venn diagram
Source: our elaboration

We attempted to find any points of contact in order to create a 'dialogue' among this programming overcoming this overlap through a simplified Matrix Organization Model by taking into account the Districts and the Meta-IPF and the Meta-LAG Programs. So our second step establishes its starting point in the Matrix Organization Model (Galbraith, 1971; 2001) that is an organizational structure that facilitates the horizontal and vertical flow of skills and information. The basis for the matrix organization is an attempt to create synergism through shared responsibility between project and functional management, because key people and activities can be shared with shared purpose and responsibility. As to other organizational forms, a matrix organization is a mixed form in which traditional hierarchy is overlaid by some forms of lateral authority. In our case, this overlay in a matrix creates two kinds of command - one along the functional lines, the other along chain lines (Kuprenas, 2003). In order to formalize this model in our case study, we apply this Matrix Organization Model in relation to the internationalization strategies provided for District Development Programs that have as lead partner the Chamber of Commerce. In fact, the main objective District Development Programs is to promote and enhance the openness to the Community and international markets; it is an aspect of vital importance to the manufacturing district, which represents the natural compendium of commercial products linked to the traditional values of the area. The activities of internationalization, begun in previous years by the Chamber of Commerce, can be supported thanks to the measures promoted by the regional integration plans and in special way thanks to the link, union and sharing of such assets by several existing programming. In order to facilitate the opening towards markets and, hence to increasing regional competitiveness, the proposed strategy is aimed at connecting and networking the District Activities - provided in their programs and by Chambers of Commerce -, the IPFs Products and firms, and LAGs Territories and Countries - that are enclosed in LAG cooperation projects. The figure below (Fig. 5) shows the Matrix Organizational Model applied to our

Metadistrict idea. The 25 LAGs, covering the whole region, were regrouped horizontally. The IPFs were regrouped according to the 7 different Chains: Wine, Oil, Dairy, Horticultural, Forestry, Livestock, Cereal and the 2 Districts are the 'containers' and are leaders of all activities aiming to the internationalization (on functional lines).

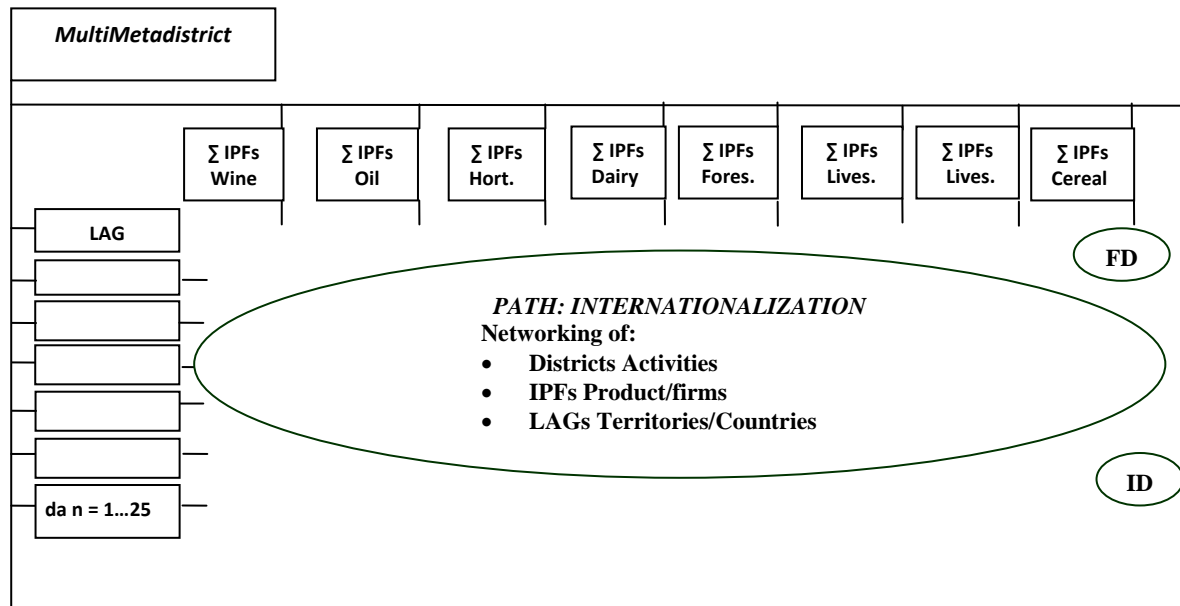


Figure 5. The Matrix Organizational Model
Source: our elaboration

5 Conclusions

The philosophy that pervades the constitution of the Metadistrict is derived and based on a form of trust that has developed through a relationship of 'proximity' too. The Metadistrict cannot exist without a relationship (at least potential) between business and research in the field of production. In the long term, given the new trend towards the reticular character of both the economic and social relationships, the Metadistrict is the most likely model to survive since the districts will take mainly two options: a) to evolve into Metadistricts, b) to disappear because of the loss of business competitiveness compared to other organizational patterns (Creti and Bettoni, 2001). Therefore, the Metadistrict, a not only geographical level strategic model, may become a network connector and/or a set of firms and territorial promotional agencies. This network could be functionally directed to share the know-how, the research and the skills among the members and, therefore, to increase the interaction among actors, farms, firms and stakeholders. A crucial role is assigned to the social capital they will be able to exploit and to generate and, above all, to the relational skills. These skills ranges from the identification, access and involvement of the resources until networking those resources (*resource pooling*) increasing the their value (Helfat et Al. 2007, 2010). Participating in a network means for a firm, especially small or medium, to access the know-how that alone would not be able to achieve, or improve, therefore, their competitive advantage. This appears necessary in special way in a time when the agro-food sector, in particular, is going through a crisis that causes the loss of competitiveness and the future of the processing phases. In particular, the standard model is changing: the omologation of consumption (Mac Donald, ODO, 4th and 5th range of products, GMO), the rediscovery of some values (land and the environment) together with the rediscovery of traditional products, those conventional and organic ones. A crucial negative point is the export of agro-food system. The merging of firms and stakeholders can mean an increase in the competitiveness and development of new outlets. In this context, the Metadistrict can bring the firms and all stakeholders towards a shared vision based on cooperation through a truly integrated programming, consisting of IPFS, Lags and Districts. As a consequence, the District NTM can enhance the multifunctional role of agriculture aimed at the environment and landscape maintenance, the promotion of rural tourism, farm, crafts, small industries and other activities related to the third sector from the perspective of a global competitiveness too.

References

- Alfano, F., Tarangioli S., and Zumpano C. (2008). Forme innovative di integrazione in agricoltura: un'opportunità per la permanenza dei giovani nel settore primario. Rapporto di Ricerca. INEA, Roma.
- Antonelli, G. (2010). La prospettiva del valore nell'analisi delle filiere agroalimentari. In *Proceedings of XVIII Convegno di Studi SIEA*, Venezia 3 – 5 giugno 2010.
- Aoki, M. (2007). Three-Level Approach to the Rules of the Societal Game: Generic, Substantive and Operational. Paper presented at SASE's Presidential Choice Roundtable on institutional change, June 28-29, Copenhagen, Denmark.
- Baars, E., Riediger, A. (2010). A market analysis of the somali banana sector and its potential for export revival: Experiences of support to agricultural marketing services and access to markets (SAMSAM) project. In *Acta Horticulturae*, **879**: 811-818.
- Cadilhon, J.-J., Fearn, A.P., Tam, P.T.G., Moustier, P., and Poole, N.D. (2009). Market linkages: Characterizing business-to-business relationships in vietnamese vegetable supply chains. In *Acta Horticulturae*, **809**: 135-146.
- Contò, F., Fiore, M., La Sala, P, and Papapietro P. (2011). The role of education, knowledge and human resources for the agricultural development in the perspective of new CAP: an hypothesis of change in Basilicata. In *Educational Research*, **2** (12): 1773-1783, December, (ISSN: 2141-5161).
- Creti A., Bettoni G. (2001). Dai distretti ai metadistretti: una definizione. In *Liuc Papers*, n. 96, Serie Economia e Istituzioni 3, novembre.
- Deidda, D. (2003). Il partenariato come modalità di costruzione del consenso e della partecipazione. In Cersosimo D. (a cura di). *Il partenariato socioeconomico nei progetti integrati territoriali*. Roma, Formez – Azioni di Sistema per la Pubblica Amministrazione, n.13.
- Engel J., Itxaso del-Palacio A. (2009). Global networks of clusters of innovation: Accelerating the innovation process. In *Business Horizons*, **52**: 493—503.
- Firouzjaie, A.A., Sadighi, H., and Mohammadi, M. A. (2007). The Influence of Social Capital on Adoption of Rural Development Programs by Farmers in the Caspian Sea Region of Iran. In *American Journal of Agricultural and Biological Science*, **2**, 1: 15-22.
- Galbraith J.R. (1971), "Matrix organisation design – How to combine functional and project teams", *Business Horizons*, February: 29-40.
- Galbraith, J. (2002), *Designing Organisations*, AMACOM.
- Gavetti, G. (2005). Cognition and hierarchy: Rethinking the microfoundations of capabilities' development. In *Organization Science*, **16**(6): 599–617.
- Gellynck X., Kühne B. (2010). Horizontal and Vertical networks for Innovation in the Traditional Food Sector. In *International Journal on Food System Dynamics*, **2**: 123 – 132.
- Gintis, H., Khurana, R. (2007). Corporate Honesty and Business Education: A Behavioral Model. Paper prepared for the *Workshop on Social Capital, Corporate Social Responsibility (CSR) and Sustainable Development*. July 24-25, Trento, Italy.
- Heilbrunn, S. (2005). Entrepreneurship, Social Capital and Community Development: The Case of the Israeli Kibbutz. In *Journal of Rural Cooperation*, **33**(2):111-126
- Helfat, C. E., Finkelstein, S., Mitchell, W., Peteraf, M. A., Singh, H., and Teece, D. J. (2007). *Dynamic capabilities: Understanding strategic change in organizations*, Malden, MA: Blackwell.
- Helfat, C. E., Lipparini, A., and Verona, G. (2010). Dynamic network capabilities: Microfoundations and managerial implications. In *Working paper*, Tuck School, Dartmouth, June.
- Irianto, B. (2011). Rural economic development in Indonesia: Implementation of Rural Agribusiness Development program and its evaluation in East Java. In *Acta Horticulturae*, **895**, 13 May: 145-151
- Kroma, M.M. (2006). Organic farmer networks: Facilitating learning and innovation for sustainable agriculture. In *Journal of Sustainable Agriculture*, **28**, 4: 5-28

- Kuprenas, J.A. (2003). Implementation and performance of a matrix organization structure. In *International Journal of Project Management*, **21**: 51–62.
- Lippert, S., Spagnolo, G. (2006). Networks of Relations, Word-of-Mouth Communication, and Social Capital'. In *SSE/EFI Working Paper in Economics and Finance* 570.
- Lorenzoni, G. (2010). Genesis of a research field: district, network, strategic network. In *Journal of Management Governance*, **14**:221–239.
- Maru, Y.T., McAllister, Ryan R.J., and Stafford Smith, M. (2007). Modelling community interactions and social capital dynamics: The case of regional and rural communities of Australia. In *Agricultural Systems*, **92**: 179–200.
- Nath, P. (2007). Vegetable Science International Network (VEGINET). In *Acta Horticulturae*, **731**: 55-58.
- Nkapnang, Djossi, I., Tomekpe, K., Van Schoubroeck, F. , Bikoï, A. , Ndemba, B., Lama, M., Ngnigone, C. , Lokossou, B. , Hocde, H. ,and Lançon, J. (2010). A regional network of dialogue and exchange platforms to improve the identification of farmer's needs and the dissemination of new cultivars of banana and plantain (*Musa* spp.). In *Acta Horticulturae*, **879**: 783-790.
- OECD. (2006). Territorial Review of Milan, Italy. OECD, Parigi.
- Okry, F., Van Mele, P., Nuijten, E., Struik, P.C.,and Mongbo, R.L. (2011). Organizational analysis of the seed sector of rice in guinea: Stakeholders, perception and institutional linkages. In *Experimental Agriculture*, **47**: 137-157, Issue 1, January.
- Regione Puglia (2010a), BURP n. 141 del 02/09/2010.
- Regione Puglia (2010b), BURP n. 146 del 16/09/2010.
- Regione Puglia (2010c), BURP n. 174 del 18/11/2010.
- Regione Puglia (2011), BURP n. 99 del 23/06/2011.
- Rook Basile, E. (2001). *Il mercato dei prodotti agricoli*. In *Diritto e giurisprudenza agraria e dell'ambiente*, pag. 601.
- Sassi, M. (2008). Modello di sviluppo rurale e nuove sfide di programmazione territoriale. In *Economia & Diritto Agroalimentare*, **1**.
- Traore A., Bickersteth, S. (2011). Addressing the challenges of agricultural service provision: The case of Oxfam's Strategic Cotton Programme in Mali. In *International Journal of Agricultural Sustainability*. **9**: 82-90.
- UE, European Commission (2001), *The European Governance A White Paper*, COM(2001) 428 definitive/2.
- UE, Committee of the Regions, (2002). Opinion of the Committee of the Regions on the 'Communication from the Commission to the Council and the European Parliament "Biodiversity action plans in the areas of conservation of natural resources, agriculture, fisheries, and economic and development cooperation" (2002/C 107/22) in *Official Journal of the European Communities C 107/73*, 3.5.2002.
- UE, Commission of The European Communities (2003). Communication From The Commission To The Council And The European Parliament. Some Key Issues in Europe's Competitiveness – Towards an Integrated Approach, COM(2003) 704 final.
- UE, European Parliament (2005), Promotion and protection of fundamental rights. European Parliament Resolution on promotion and protection of fundamental rights: the role of national and European institutions, including the Fundamental Rights Agency (2005/2007(INI)) in *Official Journal of the European Communities C 117 E/242*, 18.5.2006.
- Zumpano, C. (2007). L'approccio integrato nelle politiche di sviluppo rurale: strumenti e modalità di attuazione. In *Agriregionieuropa*, n. 9.