

## THE “NET-SYSTEM MODEL” IN NWFP MARKETING: THE CASE OF MUSHROOMS

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### Outline

1. Introduction: the research questions
2. Methodological elements for a networks analysis
3. A field survey: a comparative analysis of 2 case studies
4. Conclusions

A study carried out under Cost Action E51 “Integrating Innovation and Development Policies for the Forest Sector”

Enrico Vidale and Matteo Sommacampagna have contributed to the collection and analysis of the data on the two case-studies

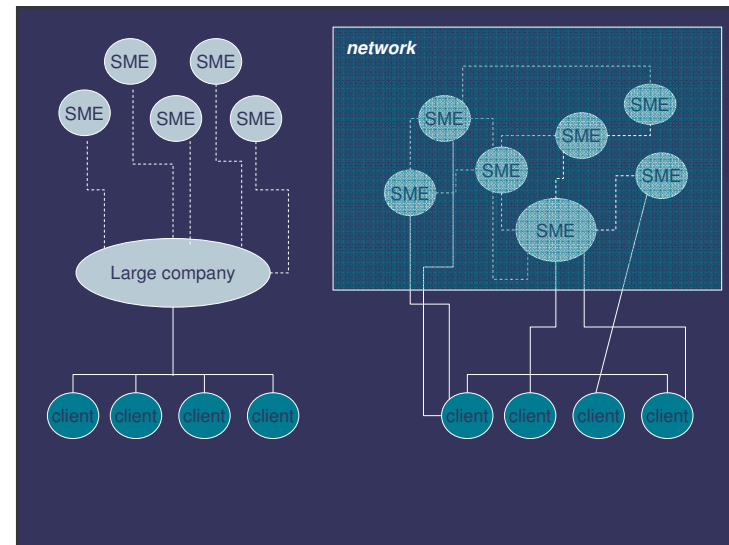
### 1. Introduction: the research questions

At **micro** level:

- For SME supplying rough material, is it better to be linked to a large, internationally competitive, trustful buyer of specialized nature-based products, or on a *network* of small-scale companies operating at local scale?
  - Vertical integration vs. horizontal integration?

At **macro** (i.e. regional) level:

- In rural development policies, is it better to support local economies based on a specialized single innovative value-chain, or on a cluster of small-scale, multi-sectoral, interconnected activities?



## 2. Methodological elements for a networks analysis

Definition of network (Human and Provan, 1997):

“an intentionally formed group of small- and medium-sized profit-oriented firms in which the firms:

- (1) are geographically proximate,
- (2) operate within the same industry, potentially sharing inputs and outputs, and
- (3) undertake direct interactions with each other for specific business outcomes. The interactions may include joint production, new product development, collective marketing and employee training”.

## Networks (“strategic alliances”) definitions

- A coalition of two or more organizations intended to achieve mutually beneficial goals (Varadarajan and Cunningham 1995).
- A mode of organization that can be used by managers or entrepreneurs to position their firms in a stronger competitive stance (Jarillo 1988).
- An intentionally formed group of small- and medium-sized profit-oriented firms in which the firms (1) are geographically proximate, (2) operate within the same industry, potentially sharing inputs and outputs, and (3) undertake direct interactions with each other for specific business outcomes. The interactions may include joint production, new product development, collective marketing and employee training (Provan and Milward 1995).
- Two or more organizations involved in long term relationships. A network may be viewed as consisting of “nodes” or “positions” (firms, trade associations, other types of organizations, etc.) and links (interaction between the nodes). The links constitute a reflection and recognition of interdependence. They are based on relationships over time (Thorelli 1986).
- A close yet non-exclusive relationship with other members (Dennis 2000).
- An organizational form logically intermediate between the pure market and vertically integrated firm (Nohria and Eccles 1992 in Dennis 2000).
- Value-adding partnerships that facilitate the exchange of experience and knowledge between member companies (Johnston and Lawrence 1988 in Dennis 2000).

## Networks definition

- **Strategic alliances** the pooling of specific resources and skills by the cooperating organizations in order to achieve common goals, as well as goals specific to the individual partners (Varadarajan and Cunningham 1995).
- **Social network**: a “set of nodes” (persons, organizations, ...) linked by a set of social relationships (friendship, transfer of funds, etc.) (Gulati 1998).
- **Business network**: structure of exchange relationships among business actors (firms as well as individuals), structure which emerges, evolves and dissolves over time in a continuous and interactive process (Halinen and Törnroos 1998).

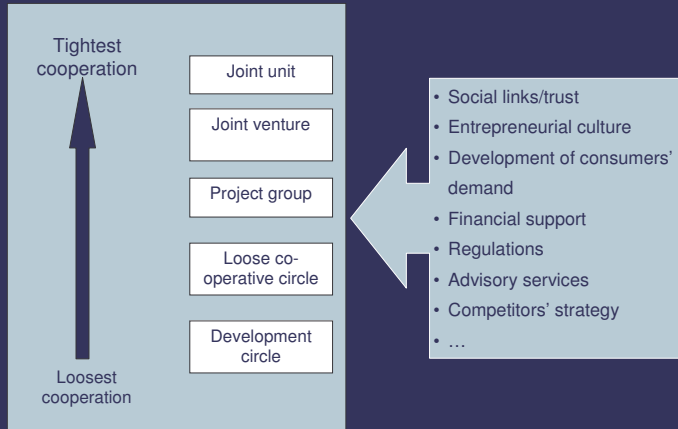
Some close concepts: (industrial) **districts**, or **clusters** with an emphasis on geographical proximity

## Main advantages for SMEs participating in a networking system (Dennis, 2000)

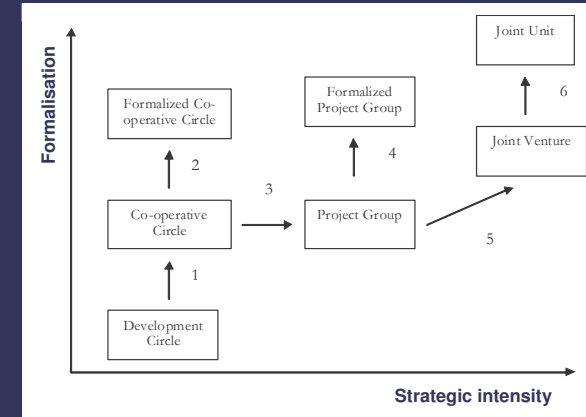
- they have the opportunity to effectively compete in divergent and often larger markets;
- they can compete on national or international level thanks to a coordination of factors such as research and development, information technology or marketing (without alliances, SMEs would be confined in their local markets);
- they can access resources and skills not owned by the enterprise itself by establishing links with companies owning complementary expertise and assets;
- they are encouraged to remain small and to specialize to gain product-specific knowledge, remaining at the same time flexible and adaptable due to very few resources stored internally.

## Main types of network

(Source: Varamäki and Vesalainen 2003)



## Networks development paths



## Possible outcomes from networks

(Source: Human and Provan, 1997)

- 1. inter-organizational exchanges** direct transactions or exchanges among network firms, such as buying and selling, jointly producing and marketing a product and exchanging friendship and information among each other;
- 2. organizational credibility** firms perceive that their external legitimacy can be enhanced through association with the network. Thus, participation can increase the visibility and credibility of member firms;
- 3. access to resources** network participation can play an instrumental role in accessing new markets, new product ideas, and other valued resources for their companies;
- 4. financial performances** economic benefits could occur within a short time after joining the network, but also in a long-term perspective.

## 3. A field survey: a comparative analysis of 2 case studies

- The same product: *Boletus* mushrooms
- Quite similar socio-economic context (rural environment, forest as predominating land use, nature-based tourism)
- 2 organizational models:
  - Dalla Valle Oy in Finland (North Karelia - FIN)
  - Borgovalditario Consortium (Emilia-Tuscany Regions - I)





Maanantai 23.6 klo 22:33 Dalla Valle - In English

**ETUSIVU**  
**AJANKOHTAISTA**  
**OYTYÖTÄI TUOTEIT**  
**TUOTON TALENTIA**  
**ASUUSRAUHE**  
**SUOKAS**  
**MÄNTYLÄ VASTAANOTTOISET**  
**AJOKIET**

**Dalla Valle Oy - In English**

CLICK HERE FOR INFORMATION ABOUT COLLECTING BOLETES!

Dalla Valle Oy on specialized in exporting boletes. Primary export target is Italy, where boletes have been reported for years. For example, in a year 2003 Dalla Valle Oy exported 80 full truckloads of boletes from the North-Carelia.

In these pages you can find important information targeted to the gatherers. You can also find timetables and driving routes of receiving trucks, and also basic information in collecting and handling mushrooms. Remember, that gathering of mushrooms is law-free in Finland!

Dalla Valle Oy  
 Eihäskari 6  
 80910 KAJAHO

Tuontivaltioihin  
 Lomppu Dalla Valle  
 Puh. 013 220 767  
 Fax. 013 201 228  
 GSM. 8000 297 811  
 dalla.valle@kolumbus.fi

<http://www.dallavalle.fi>

**FUNGO DI BORGOTARO I.A.S.**

**Il fungo di Borgotaro**

CONSORZIO TERRITORIO I.O.P. NORMATIVA PER LA RACCOLTA FUNGO PORCINO I.G.P. DOVE MANGIARE IL FUNGO STRUTTURE RICETTIVE NEWS ED EVENTI STABIO NASCENCO GALERIA FOTOGRAFICA FORUM RICETTE MIT DEL FUNGOLO UTILITIES CONTATTI

**NEWS ED EVENTI**

2 3 4 5 6 7  
 8 9 10 11 12 13 14  
 15 16 17 18 19 20 21  
 22 23 24 25 26 27 28  
 29 30

**Galleria fotografica**

Guarda tutte le foto di funghi inviate dai visitatori del sito, ed invia la tua foto! Vai >>

**Proponi a Cerca la Borsa Valena**

Maretti, Pileri, Cesa, Appennamenti!

**News ed eventi**

29 Giugno 2008 Patagonia

Domenica 29 giugno si terrà una suggestiva manifestazione nei castagneti ... maggiori informazioni

**Newsletter alert system**

**Stanno nascendo?**

In questo link trovare informazioni in merito alla presenza dei funghi, dove per zona e comune... Entra >>

**Doce mangiare il fungo IGP**

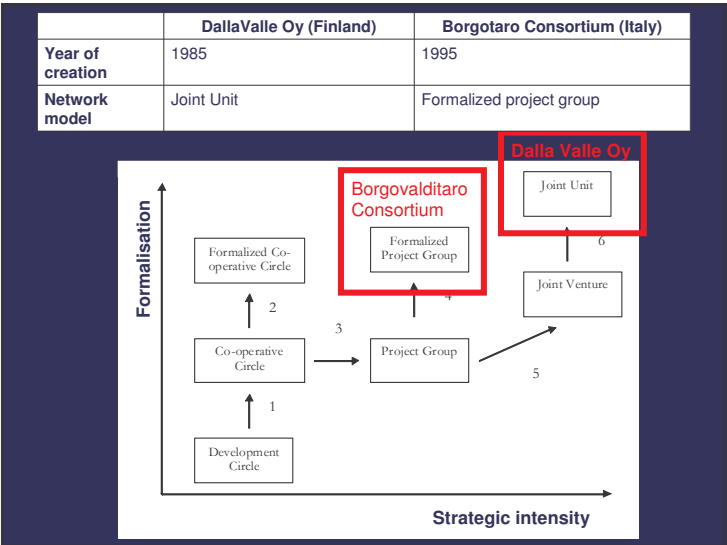
**Fotografia Fungo**

Clicca per vedere la tua foto

**Il Kit del Funghiolo**

manuali, cartine per il cercatore esperto e meno esperto.


[www.fungodiborgotaro.com](http://www.fungodiborgotaro.com)




	DallaValle Oy (Finland)	Borgotaro Consortium (Italy)
Year of creation	1995	1995
Network model	Joint Unit	Formalized project group
Innovation	System of m. gathering; logistic (30 collection centres), freezing technology, grading system	

**Fresh mushrooms class information for gatherers**


**CLASS I:**  
M. has to be whole, solid and without worms. Pores has to be white.



**CLASS II:**  
M. has to be whole, solid and wormless. Pores has to be complete and yellowish or yellow.



**CLASS III:**  
M. has to be sliced in half. Pores has to be green. If pores are thick, half of them has to be taken off from their edges. In a rainy day, only the stem of the m. is included in class III.



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**EC Mark of origin**

**Production areas**

Tabella della qualità dei funghi spersonalizzata da:

**ACQUISTA ONLINE!**  
Funghi Porcini secchi e sott'olio, prodotti dai coltivatori e cacciatori locali.

www.borgotaroconsortium.it

COMUNE	ZONA	TESSERINO	CRESCITA
	Clicca la zona per vedere la cartina	Clicca sul colore per il prezzo al kg	Min   Max
Ultimo aggiornamento: 22/10/2018			
Albareto (I.G.P.)	Comunale di Montegrosso, Origgio, Tombato e Buscetto	Verde	
Albareto		Verde	
Borgo Val di Taro (I.G.P.)	Comunale di Monte Rappallo	Rosso	
	Comunale di Casalponzo, Salsola, Salsola	Rosso	
		Rosso	
Badonia e Tomolo	Foresta Larianate Monte Prino e Comune di Setterone, Consorzio Valli Taro e Taro	Grigio	
Barco	Comunale di Baragotto, Corchia e Vallonia	Atarocce	
Borgo Val di Taro (I.G.P.)	Comunale di Basiglio, Fontolo (zona di Monte Rappallo)	Blu	
Borgo Val di Taro (I.G.P.)	Comunale di San Vincenzo e Valdena (zona di Val Tardine)	Blu	
Varsi e Bardi	Consorzio Monte Barigazzo (zona Tossa) e	Afrancione	

**Type of permit**

**Growing rate**

Sito ufficiale del Fungo di Borgotaro

**TESSERINO VERDE**  
Comunale di Gotra, Buzzò, Albareto, Boschetto, Groppo, Tombeto e Montegropo in Comune di Albareto.  
Verranno rilasciati tesserini di colore verde con le seguenti caratteristiche:  
\* giornaliero (valido per il giorno indicato nel tesserino):  
costo: Euro 15,00 per i non residenti in Comune di Albareto; Euro 6,00 per i residenti nel Comune di Albareto nonché per i proprietari, ed affittuari con contratto almeno annuale, di seconde case nelle frazioni delle Comunali;  
\* semestrale (valido comunque non oltre il 15.11.2003):  
costo: Euro 150,00 per i non residenti nei Comuni di Albareto Euro 67,00 per i residenti nel Comune di Albareto nonché per i proprietari, ed affittuari con contratto almeno annuale, di seconde case nelle frazioni delle Comunali

Modalità di accesso: i tesserini saranno vidimati, nel punto di vendita, con il timbro della Comunale di accesso, da personale incaricato dal Consiglio di Amministrazione.

Tale tesserino darà diritto all'accesso ad un'unica Comunale, pur consentendo di percorrere a piedi e di esercitare la raccolta nel territorio di tutte le Comunali facenti parte dell'area B).

In considerazione dell'antica consuetudine di reciprocità fra le Comunali confinanti di S.Vincenzo-Rovinaglia in Comune di Borgotaro e Gotra, Buzzò e Albareto in Comune di Albareto è consentito agli utenti lo sconfinamento;

Per evitare un eccesso di carico giornaliero di cercatori con effetti negativi sulla capacità di rigenerazione dell'ecosistema, viene stabilito un numero massimo giornaliero di persone a cui consentire l'accesso come a seguito specificato:  
**Comunali di Gotra e Buzzò n.100**  
**Comunali di Albareto n.700**  
**Comunali di Boschetto e Tombeto n.120**  
**Comunali di Groppo n.100**  
**Comunali di Montegropo n.200**

Giorni e orario di raccolta: martedì, sabato e domenica; la raccolta può essere effettuata a partire da un'ora prima della levata del sole, mentre l'uscita dall'area B) deve avvenire entro e non oltre le ore 15.

Quantitativi: non oltre **3 Kg.**

	DallaValle Oy (Finland)	Borgotaro Consortium (Italy)
<b>Year of creation</b>	1985	1995
<b>Network model</b>	Joint Unit	Formalized project group
<b>Innovation</b>	System of m. gathering logistic (30 collection centres), freezing technology, grading system	EC mark of origin; system of regulation for permit selling
<b>Value chain</b>	Vertical integration, short chain	Horizontal integration, net-system
<b>Forest production area</b>	Very large: North Karelia (Russia)	22,000 ha of community forests (with the mark); total area involved: 60,000 ha

	DallaValle Oy (Finland)	Borgotaro Consortium (Italy)
<b>Year of creation</b>	1985	1995
<b>Network model</b>	Joint Unit	Formalized project group
<b>Innovation</b>	System of m. gathering logistic (30 collection centres), freezing technology, grading system	EC mark of origin; system of regulation for permit selling
<b>Value chain</b>	Vertical integration, short chain	Horizontal integration, net-system
<b>Forest production area</b>	Very large: North Karelia (Russia)	22,000 ha of community forests (with the mark); total area involved: 60,000 ha
<b>Production volumes</b>	From min 20 (in 1999) to max 1,100 (in 2003) tons per year. As an average, in 1997-2007: about 280 tons/year.	330-440 tons/year (with an average production of 15-20 kg/ha/year and an area of 22,000 ha)
<b>Infrastructures</b>	30 collecting centres, 2 refrigerator centres (plus an external one)	6 local enterprises for mushrooms processing and trading, 1 shop-laboratory-restaurant
<b>Employees</b>	Max 21,000 pickers; 25-150 seasonal employees (July-Oct) in the refrigerator centres	28 full-time workers in 2 large industrial firms, 4 full-time workers in the shop-laboratory-restaurant, 10 seasonal workers

Enterprises: 62 (in 2008)

- 15 Agritourisms/ Farm businesses
- 12 Hotels/Guest quarters
- 8 Bed&Breakfasts/Inns/Hostels
- 9 Cheese, sausage and wine growing and producing factories
- 2 Didactic farms
- 3 Museums/Private collections
- 30 Restaurants/Porterhouses
- 26 Typical products sellers

Territorio  
THE TRAIL  
MAP OF THE TRAIL  
ITINERARI  
TOWNS ALONG THE TRAIL  
PARKS  
MUSEUMS  
TOURIST INFORMATION  
FOTOGALLERY

FIRMS  
Bed & Breakfast  
Caseificio / Salumificio / Az. Vitivinicola  
Farmhouse holidays  
Fattoria Didattica  
Hotel  
Museo / Collezione privata  
Restaurant  
Sale of local products

Link  
Fungo di Borgotaro  
Meteo Apuane  
Strada del Funghetto  
Emilia Romagna Turismo

Ultime news  
Lunedì 24 Settembre  
AUTUNNI  
Autunno gastronomico guidato, ristoranti, ristoratori, folcloro

Martedì 28 Agosto  
FIERA DEL FUNGO DI BORGOTARO IGP  
Il fungo porcino di Borgo val di Taro, prodotto

	DallaValle Oy (Finland)	Borgotaro Consortium (Italy)
<b>Products/ services sold</b>	Marinate, dried, in oil, frozen mushrooms.	<ul style="list-style-type: none"> <li>•Fresh</li> <li>•Dried, in oil, frozen (imported)</li> <li>•Mushroom picking permits</li> </ul>
<b>Main customers</b>	Large companies, restaurants, refreshment or catering agencies	<ul style="list-style-type: none"> <li>•Local retailers, local restaurants, brokers.</li> <li>•Tourists, visitors.</li> </ul>
<b>Primary stakeholders</b>	Mushrooms' pickers, services suppliers (trucks, liquid nitrogen service, aircraft cargo)	Few hundred local professional mushroom pickers, Consortium members ( <i>comunalia</i> and their association, forest owners: residents), local enterprises processing mushrooms
<b>Secondary stakeholders</b>	Travel agency, mushrooms tourism's visitors, car rent agencies, cottages, restaurants	Municipalities' administrators, visitors and tourists, local retailers, local restaurants, the society as a whole (investments are made for forests maintaining).
<b>Legal framework</b>	Tax-free earnings received from mushroom picking	Local public authorities or forest owners' associations are allowed to sell permits for collection
<b>Collecting rights</b>	Extensive everyman's right	By paying permits

	DallaValle Oy (Finland)	Borgotaro Consortium (Italy)
<b>Forest management's issues</b>	Main species: <i>Picea abies</i> , <i>Pinus sylvestris</i> Spruce forests are usually managed for timber production, thus negatively effecting mushrooms production. The firm is mentioned in North Karelia Forest Strategy 2006-2010 as regards the natural products production.	Main species: <i>Fagus sylvatica</i> , <i>Castanea sativa</i> , <i>Quercus spp.</i> Beech forests are managed as coppice for the goal of maintaining/increasing mushrooms production.
<b>Risks of overexploitation or unsustainable collection rate</b>	Approximately 30% of all the wild mushrooms in North Karelia (and about 2% in Finland) are collected by Dalla Valle Oy. In some cases, especially near the cities, about 100% of them are collected for the firm's production, with significant risks in term of unsustainability (mushrooms no longer available).	Limited or no risks: clear and enforced regulation for collecting, strict monitoring activity by the Consortium, forests carrying capacity defined through scientific studies.

## 4. Conclusions

- Income generation: the well organized, specialized company is creating more *direct* AV and employment opportunities
- ... but:
- this activity is more exposed to risk and instability (seasonality, at least)
- the *indirect* effects of a network system are much more relevant

Networks are also dynamic: network growth can bring problems, conflicts and new risks, also because outcomes can have an asymmetric distribution among firms composing the network (Gulati, 1998)

Two components of the most advanced form of networks:

- **A (contractual) coordination** of economic agents for the supply of products and services to increase profit and/or stability (a market share)

- **A mutual trust:**

← input = **social capital**

→ output = not only market products are supplied but also "relational goods"

