



SOLINSA
Support of Learning and Innovation
Networks for Sustainable Agriculture

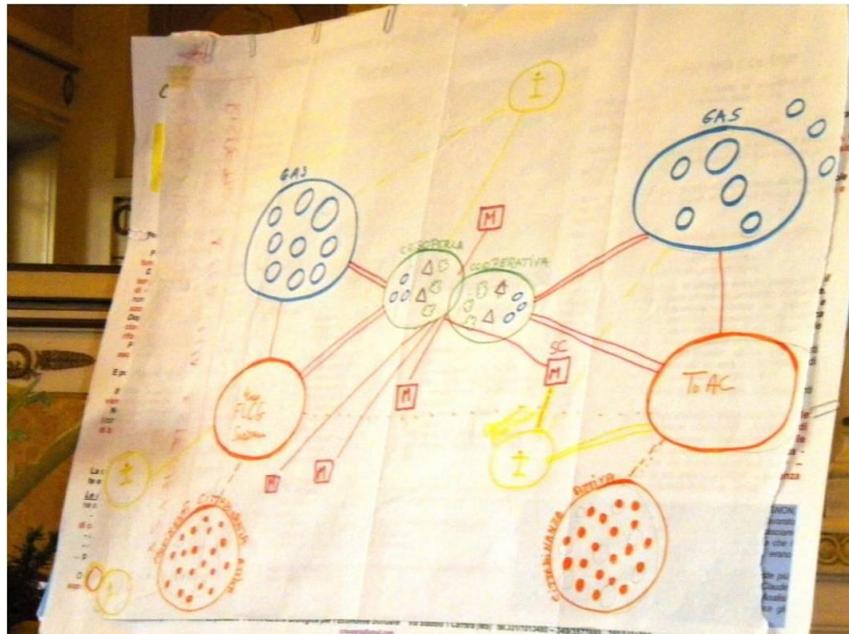
Agricultural Knowledge Systems In Transition:
Towards a more effective and efficient support of Learning
and Innovation Networks for Sustainable Agriculture

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CRISOPERLA ASSOCIATION

LINSA Case Study Report: Italy

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1 SUMMARY

“*Crisoperla – free from parasites*” is an association aimed at promoting organic farming and, more generally, sustainable lifestyles and development models. Born in 2006 and formally established in 2009, the Association has grown in number and types of actors. It involves organic farms, consumers’ groups (GAS - Solidarity-based Purchase Groups), other consumers’ associations (as ACU Toscana - Consumers and Users Association of Tuscany), agronomists, social farming and producers cooperatives, and increasingly interacts with local institutions and other networks. It operates in an area at North of Tuscany and, partially, in the territory of the neighbour Liguria region. The area, including some small towns and extended rural territories, has been interested during the past decades by intense economic crisis and phenomena of social marginalization. The LINSAs have developed in this context, integrating country and urban dwellers, economic and social needs.

According to the working definition of LINSAs, the case-study aimed at understanding this network structure and functioning, included learning processes and knowledge creation and sharing, governance mechanisms, the identification of strengths/weaknesses and the identification of most suitable forms of support. To that end it combined the SOLINSA research methodology (five workshops) and other qualitative research methods (interviews, documents and communication flow analysis, participation as observers in LINSAs activities).

The following are the main findings.

As a network aimed at creating an alternative system of knowledge and practices around food, *Crisoperla* LINSAs was born and developed with the intention of placing itself in a position of autonomy compared to local main actors of the official AKS, whose attitude and actions were considered inadequate. The shared willingness to support and enhance organic farming was the early factor fostering cooperation and hybridisation among actors. The further structuring of the network saw the institutionalisation of the relationships (through the establishment of a formal association and a cooperative) and a clearer definition of the fields of activity: production and marketing and relational, cultural and political activities. These two operational areas and the related networks represent important relational spaces where learning processes have continued to occur and the conditions for members to align around the shared ‘enterprise’ and to impact on local context have further developed.

The features and the experience of *Crisoperla* show the potential of hybrid learning networks to define and achieve sustainability goals: they show the importance of the interaction among farmers, between these and organized groups of consumers and, more generally, civil society organizations; the encounter between the world of production and consumption and other areas of social mobilization and citizenship; the new forms of interaction between this new food network and public institutions. But the analysis of the structure and of the mechanisms of functioning and governance of this network also highlights some weaknesses in the management and organizational aspects.

It so emerges how the main needs for support are related to the improvement of the network building capacity and the related learning processes, strongly based on peer-to-peers exchange and on 'boundary works'; the enhancement of the effectiveness and efficiency of network internal management, through definition of suitable governance mechanisms; the availability of tools to support the development of collective strategic capacities, the definition and implementation of joint projects and cooperative initiatives; the possibility of exchanges with other similar experiences.

2 INTRODUCTION

"Crisoperla – free from parasites" is an association aimed at promoting organic farming and, more generally, sustainable lifestyles and development models. It operates in an area at North of Tuscany (the province of Massa-Carrara) and, partially, in the territory of the neighbour Liguria region. Born in 2006 and formally established in 2009, the Association has grown in number and types of actors. It involves organic farms, consumers' groups (GAS - Solidarity-based Purchase Groups (Brunori et al., 2011 and 2012a)), other consumers' associations (as ACU Toscana - Consumers and Users Association of Tuscany), agronomists, social farming and producers cooperatives. At the moment, in 2013, it does not include local administrations, but recently some local municipalities have been manifested interest in its activity and the will to act jointly.

Starting from the SOLINSA working definition of LINSAs, the presence of a variety of actors acting around sustainability goals (operationalised in the promotion of organic farming and of solidarity economy patterns) is the main feature which makes it a LINSAs. The common commitment for the recognition of the specificity of organic farming and of the related localised food systems, as well as for the more general promotion of the culture of sustainability in food practices and in local resources management, at first has made this network a Community of Practices (CoP) (Wenger, 1998). However, its further development shows how this CoP has become part of broader Networks of Practices (NoP) (Brown and Duguid, 2001), which have the same features of CoPs but are not necessarily characterized by spatial proximity and so strong ties. The network has in fact started to interact with other local organizations as well as has evolved outside the two regions of origin, by establishing relationships with organisations for organic farming, at national and international level, and with other organizations engaged in the area of 'solidarity economy' in Italy.

Within the relational spaces of their network *Crisoperla* actors co-produce new knowledge and create conditions for resources sharing and cooperation in common initiatives. The communication and interaction among the actors are crucial to that end. *Crisoperla* has a strong flow of internal communication (supported by mails exchanges, monthly meetings), concerning various issues (internal organisation, organisation of common initiatives, specific topics of discussion) and a communication flow towards the outside (supported by face-

to-face interaction, social network profile, flyers, brochures, press articles and other documents, speeches at public events). The first communication practices allow the interaction among the different entities who compose this hybrid network (farmers, consumers, technicians, CSOs, etc.), contributing to the development of specific areas of interest but also to the alignment of the members around the common 'enterprise', through comparison and negotiation of visions, interests and goals, at operational as well as at more theoretical-political level. The second communication practices contribute to achieve the goal of being an active actor on the territory, able to impact on socio-cultural and political environment. In addition to these spaces, there is the communication which develops within the broader networks that Crisoperla has entered; stimuli received through these interactions are a further learning opportunity.

According to the working definition of LINSAs and the case-study methodology of SOLINSA project, the main aim of the study is the understanding of this LINSAs structure and functioning, included governance features and dynamics, the mechanisms of learning and of knowledge creation and sharing, the identification of strengths and weaknesses and, consequently, the identification of possible tools for support.

3 METHODS

The analysis of case study was developed through a combination of methods, including:

- 5 thematic workshops (according to SOLINSA methodology), dealing with facilitated discussion on different topics of LINSAs interest:
 - presentation of the project, common perspectives (presentation and discussion);
 - concept of innovation and network analysis (mind map and network analysis);
 - internal rules (group discussion and thesis method);
 - participation in a workshop organised by Crisoperla on the topic of GMOs ("GMOs no thanks");
 - shared network history analysis, future perspectives (presentation, feedback, timeline and brainstorming).
- structured and semi-structured interviews to the network members (20 in total). We interviewed representatives of different groups of actors of the network: farmers (more and less involved in Crisoperla's activities), the two agronomists (one of them as representative of Under the Same Sky Cooperative), representatives of GAS involved, fishermen and women members of the other two cooperatives. In the Appendix 2 we attached the full outline of the interviews, mostly addressed to the history of the farm/cooperative/GAS, to the type of involvement in Crisoperla (time spent, for which activity etc.) and to what they considered as innovation, regarding Crisoperla and their individual work.
- participant observation in several monthly meetings of the association. This participation was significant as it provided occasions of reflection with the LINSAs and opportunities for setting up future collaborations (e.g. we planned together a research to deepen the functioning and the potentialities of GAS).

- participation in public initiatives and events organized by the LINSAs. The SOLINSA research team has been involved as scientific representative in several public seminars (on organic farming, solidarity economy and GMOs) organized by Crisoperla; these events were useful to deeply interact with the LINSAs and to observe its behavior and relationships in a public context (e.g. with local public administrations).
- analysis of documents, papers and press articles related to LINSAs activities.
- analysis of the internal communication flows (actors involved, topics, main participants and related topics); this due to the fact that the research team had access to the mailing list of the network.

Combining the different methods described above, we analyzed the following characteristics of LINSAs: scale, origin and functions, degree of integration, level of learning and innovation, relationship with the AKS, efficiency and effectiveness of support, governance mechanisms, perception of sustainability.

4 RESULTS OF THE ANALYSIS

4.1 Constraints and opportunities for LINSAs within their particular context and the support needs for successful LINSAs

The LINSAs Crisoperla has developed in a particular territorial context, characterized by particular social and economic features. The territory is that of Lunigiana, a historical region divided for administrative reasons between Tuscany (the province of Massa-Carrara) and Liguria (the province of La Spezia). It is a mainly mountainous territory and it is considered an area at “risk”, where the production activities (agriculture and crafts) are in decline and depopulation is a growing phenomenon. The reasons are led back both to the hybrid nature of the area (it is in Tuscany but inhabitants feel themselves Ligurian) and to the characteristics of the territory (towns far apart, inadequate infrastructure and consequent abandonment of marginal sites) which affected the production capacity and social interaction. Crisoperla has its origin in this area where, until 2009, there were no bottom-up forms of connection between the different components of production world and civil society. The needs for new relationships among individuals and among the different social and economic components, due to the territorial isolation and the non-sharing of the mechanisms of territorial government, contribute to create the conditions for the development of this LINSAs and of the related social capital.

About the role of local institutions, they have different sensitivity to the issues of sustainable farming and lifestyles, leading to different possibilities of action in the area. In particular, local governments (there are many municipalities) have not always proved to be willing to cooperate with the LINSAs. Some opportunities have however developed with some municipalities (also of Liguria), who share

with Crisoperla the same values about preserving and enhancing their territories (organic farming, small-scale agriculture and custody of the territory).

The issue of support for LINSAs as Crisoperla is quite articulate. Both the external public support (regional funds) and the internal one (volunteer work, facilitation/brokerage activities), although important, appear not sufficient to ensure that the LINSAs can achieve its goals of growth in terms of learning, innovation capacity and transformative potential. Public support has been helpful in the early phase of the experience of Crisoperla (sustaining the organisation around the issue of organic farming), while more recently it appears less crucial and requested just for specific reasons (e.g. funding of self-organized training activities; funding for a collective project for the marketing of organic products at regional level, of which at the moment the outcome is unknown). It should be recognized, however, that the current forms of public support appear not adequate to support the development and the success of LINSAs as Crisoperla. They in fact need specific support for networking, internal communication, organisation and management, development of collective strategic capacity and cooperative action, communication to outside.

4.2 Mechanisms of network development, learning and innovation processes and connections with the formal AKS systems

Crisoperla LINSAs are the result of a complex (still on-going) networking process. The growth of the network, its articulation with relation to the various fields of interest / interaction of actors, its hybridization through the progressive openness to new relationships and, thus, to new attitudes, knowledge and practices are an integral part of the development of the learning and innovation processes. This network represents that 'relational space' where learning takes place, as answer to specific needs or opportunities. Within it, the involved actors change their role, as they find the opportunity to enhance their specific skills, at the same time allowing the process of structuring of the space of learning, in which new knowledge is co-created. As other experiences show, the social capital that develops in such a relational space creates an environment conducive to learning, encouraging through the informal exchange and sharing of experience the formation of knowledge ('peer-to-peer exchange' and 'learning by doing ') Knickel et al., 2009; Proost et al., 2009); these processes, in their turn, contribute to increase and reinforce the social capital, creating a virtuous circle between this and learning processes.

The first element fostering the interaction among actors was the farmers' shared perception of some problems in their activity: the lack of commercial opportunities for organic products on conventional channels and, more generally, the difficulties in running the production process (due to lack and high price of inputs); in addition to that, the perceived distance from mainstream institutions (especially farmers' unions) about the approach towards organic farming. A following crucial step in the development of the network was the establishment of relationships between farmers and consumers organised into GAS. From both of the parts, this relation has entailed deep internal changes

because of the need to redefine identities and responsibilities as producers and consumers, to reorganize routines, to achieve new knowledge and skills. At the same time, the encounter between these two different worlds has given the opportunity to create a new common space of learning, fostering processes of interaction and negotiation on crucial points (meanings, visions, goals).

The structuring of the network has gone through two important moments, closely related. One is the formalisation of the group of farmers, technicians and GAS in the Association Crisoperla, a crucial milestone for the consolidation of the internal relationships and the interaction with the outside. The other is the definition of two separate fields of activity: the activities related to production and marketing, carried out by a Cooperative (Under the same sky) which includes farmers and technicians already belonging to Crisoperla, and the activities more specifically related to relational, cultural and political aspects, runned by the Association.

This more structured phase of the network still sees learning and innovation occur through the various relationships among the actors, internally, and through the new interactions established with the outside. Within them, social learning continues to take place leading to the construction of shared visions and practices. The fact that the farmers members of Crisoperla are all organic, facilitates peer to peer exchange: farmers share their expertise and pool their experience. Equally important is the social learning that takes place between “agricultural” and “non-agricultural actors”: the sharing of different experiences of life and work leads to a greater awareness and understanding of the needs of the ones and the others, and this is important to define common objectives and share a strategy.

The table 1 shows the main areas of interaction and learning of Crisoperla network.

Table 1 - Functions of the LINSAs, actors involved, forms of interaction

Activities / functions	Key actors	Codes of conduct	Networks	Actors involved in the interactions
Managing direct relationship between consumers and producers	<ul style="list-style-type: none"> • technicians • farmers • fishermen • GAS 	Entry/exit rules: problems of competitions among farms	GAS and associations	<ul style="list-style-type: none"> • Farmers • Consumers / GAS
Organizing farmers' markets	<ul style="list-style-type: none"> • Farmers (coordinated and often represented by the President of Crisoperla, Giulietta Mulini) • "Under the same sky" Cooperative 	Farmers attending the markets must represent the whole association	Organizational committees of farmers' markets,	<ul style="list-style-type: none"> • Local administrations, • organizational committees of farmers' markets, • consumers
Activating learning among producers and among producers and consumers	<ul style="list-style-type: none"> • Technicians, • Farmers • Fishermen 	Exchange of knowledge among farmers. Need of communication instruments to better understand consumers' needs and vice - versa	Group of farmers adhering to Crisoperla and to "Under the same sky" Cooperative	<ul style="list-style-type: none"> • Farmers • Consumers
Interacting with local public institutions and civic movements	<ul style="list-style-type: none"> • Farmers (mainly Giulietta) • Technicians • GAS 	Decisions are mainly taken through the mailing list The President	Other associations Promoting committees (i.e. referendum on	<ul style="list-style-type: none"> • Other associations • Promoting committees (i.e. referendum

	(Geneviève) <ul style="list-style-type: none"> • ACU (Consumers - Users Association) 	represents the association outwards, sometimes assisted by the two technicians (Franco and Angela)	public water, landscape conservation)	on public water, landscape conservation)
<ul style="list-style-type: none"> • Interacting with other organizations outside the territory 	<ul style="list-style-type: none"> • GAS (Geneviève) • Farmers (mainly Giulietta) 	Exchange of information and knowledge. Need of communication skills to more effectively interact	Other organizations engaged in organic farming and solidarity economy issues/practices, at regional and national level and also in other countries	<ul style="list-style-type: none"> • Farmers / “Under the same sky” Cooperative • Consumers / GAS • Other organizations outside the territory

The network facilitates a high intensity of interaction among members. Crisoperla has the features of a “participant-governed network” (Provan and Kenis, 2007), managed directly by its members without external agents. As such, the network is characterized by a high level of sharing and is highly decentralized as “involving most or all network members interacting on a relatively equal basis in the process of governance” (shared participant governance). According to this model, it is the collectivity of partners themselves that makes all the decisions and manages network activities and any matter concerning the association is shared by activating the different forms of communication that the association has adopted.

There are several moments in which the actors meet and exchange their views and experience, for example during participation in farmers' markets, during the monthly meetings of the Association and at public initiatives that are managed and organized by Crisoperla.

The communication that flows among Crisoperla members is however characterized by a different intensity and the degree of sharing among all the members is related to different areas of discussion. If, for example, the exchange of information is related to a technical problem on agriculture, a farmer asks another farmer for help, without addressing to the group of consumers; sometimes the issue is shared with the two technicians. This kind of

exchange of knowledge so does not involve all the actors of the network. With regard to political-cultural-dissemination topics, the passage of information and knowledge takes place among all the actors of the network, even if the level of participation in the exchange and sharing can vary. Not all members are in fact involved in discussions about these topics which, in this case, occur mainly among the groups of non-farmers (some farmers participate, but they are always the same).

The tools and methods of communication adopted - direct interaction during the monthly meetings of the Association, farmers' markets and public initiatives organized; indirect interaction through the mailing-list - create the infrastructure to share knowledge and to make the decisions concerning the activities of the network. The mailing list is a tool which is used not only to exchange information useful on the operational level, but also to propose topics to be discussed and on which it is necessary to take decisions (e.g. participation in a fair or in a conference, organization of special events, cultural issues, official positions to be taken with respect to local matters etc.). So, the mailing list is a space which allows the different ideas (also relating to external stimuli) to meet and facilitates the face-to-face confrontation and decision-making processes. The monthly meetings are the spaces in which the last ones are finalized. The results of these processes are then more largely socialized on the mailing-list, as well as the reactions about the common initiatives organized.

Table 2 shows these communication processes and the roles played by the communication tools.

Table 2 - Communication processes

Topics and actors involved	Communication process
Network members - topics of interest, news	Sharing of the topic on the mailing list ⇒ discussion and agreement ⇒ monthly meeting to ratify the decision and for organizational details ⇒ updating of progress on mailing list
Crisoperla and external subjects (e.g. public subjects for the organization of an event or a market)	A member of the association receives a proposal (President, vice president or Genevieve mostly) ⇒ sharing on mailing list to discuss the proposal ⇒ monthly meeting to decide and, in the case, to activate the organizational phase ⇒ updating of progress and following reactions on mailing list

Crisoperla LINSA was born and developed with the intention of placing itself in a position of autonomy compared to some of the main actors of the official AKS, as Farmers' Unions and advisory services. The two agronomists, founders of the association, had already made the choice to get away from the official system of advisory services, which they considered not suitable to support

organic farms and, more generally, the development of organic farming. According to them, it was not addressed specifically to enhance the quality of organic products and the role and the ability of organic farms to contribute to a different development of the territory. At the basis of these deficiencies they put a different vision of organic farming and of its potential and opportunities. They so set up a model of technical assistance geared more closely to the defense of the specificity of this method of production, taking sometimes distance from the official system. Doing that they also recognized the value of the farmers' knowledge and the importance of the exchanges among farmers. For this reason, they re-organized technical assistance to production relying on the interactions between farms in the same area. In the same way, by encouraging forms of cooperation, they supported farms in solving marketing problems, central to their survival (in a market that makes difficult the provision of inputs for organic farming and does not reward adequately organic products). This was another issue completely neglected by the conventional system of technical assistance.

In Italy there are three Farmers' Unions. In Lunigiana one of these (Coldiretti) in particular plays a key role, also at political level. Organic farmers who adhere to Crisoperla (and the association itself, as a whole) have always had a critical opinion of Farmers' Unions: they do not consider appropriate the type of support that these organizations provide to organic farming and have some doubts on the commitment of these organisations in promoting sustainable forms of agriculture. Especially at the local level Crisoperla has always contested the mode of action of the Farmers' Unions, which seem to them more interested in having political "control" of the territory than having at heart the real interest and welfare of the farms.

No farms of the Association make use of advisory services from an agronomic point of view: the agronomic management of the farms is based on the individual experience and on the exchange of knowledge with other farmers belonging to the network. Farmers are turning to Farmers' Unions not to receive technical assistance but for administrative and bureaucratic issues, such as keeping the accounts, management of pension contributions etc.

Despite of this, in order to cooperate in the organization of local fairs and events during 2012 and 2013 the network worked to establish new relationships with some organizations and structures of the AKS on the territory. It also interacted with some local associations for organic farming, with the aim of encouraging the renewal of these organizations. To develop its cultural activities, the LINSa has moreover developed connections with some structures of the school system: in two high schools in Liguria, Crisoperla organized courses for students about organic food and farming. Within this framework it is crucial the role of some members of the network, who have represented the point of contact between Crisoperla and the structures they work with, so acting as 'brokers'.

Regarding the relations with research of the AKS and, specifically, with the University system, the participation in the SOLINSA project represented an important opportunity, "came at the right time" as acknowledged by Crisoperla

members themselves. The Association has asked several times the SOLINSA team studies for advisory services on specific technical aspects (e.g. methodologies for calculating prices of organic products and wildlife management), as well as for participation in dissemination events organized in the area.

The relationship of Crisoperla with the AKS so can appear not linear: on one hand, the actors tend to specify their detachment from traditional technical assistance, education and research system and reaffirm their willingness to place themselves as an autonomous subject; on the other, in some way they seek to establish collaborations. In fact, it seems there is no willingness by the LINSAs to collaborate on a permanent basis or join the AKS, basically because they feel they have a value system and a learning approach that differ from that of Farmers' Unions and technical assistance services. They have an approach to knowledge and capacity building different from that of the formal system and finds new and more significant stimuli from the interactions within other networks. The situations in which Crisoperla is willing to cooperate with the mainstream organizations are special occasions (mainly public events), which represent considerable opportunities to affirm its vision and to spread an alternative culture. At the same time, it has to be recognized as through its approach and its effort to establish new alliances aimed at realizing its goals Crisoperla is more or less consciously contributing to innovate the conventional knowledge system.

4.3 Learning approaches, methods and tools used in LINSAs

Forms of formalized and non-formalized learning coexist within Crisoperla network.

The first kind of learning is managed directly by LINSAs members. One of the most fruitful experience to this regard is represented by the organization of study circles to improve the management of the association and to deepen some topics of special interest. To that end the Association answered a call by the Municipality of Carrara, which provided funds for training activities addressed to organized groups (associations, etc.). They proposed two courses: one on group management and consensus method, the other on agricultural legislation, with particular focus on the rules regarding access to land. Only the first course, related to the group management, took place. In this case, the learning process has been thought, organized and managed by a specific group of people (11, between farmers, members of the GAS, technical and consumer associations) (see Appendix 1 - Organisation of learning paths).

More continuative and likely effective are the non-formalized learning, occurring through communications and cultural exchanges which take place between the network members and between them and the other actors with whom the network establishes relationships (Appendix 1 - "Relationship with fishermen coop" and "Visit of French AMAP").

As we said, the development of the learning process has followed the various stages of formation and growth of the network. In its early stages, organic

farmers have given rise to an intense peer-to-peer exchange of information and pooling of experience about organic farming techniques and relation with the technical input markets (e.g. seeds, fertilizers etc.). Later, the interaction among farmers has continued to solve technical problems or to manage marketing actions. The participation in local farmers' markets together with periodical meetings represent occasions to do that.

The interaction with GAS has represented another opportunity of learning, as it has allowed the encounter between two different worlds and the related different visions, knowledge, experience, needs. The interaction between these two components of the Association has deeply shaped its structuring. The work of confrontation and negotiation on specific points (a 'boundary work', focusing on specific 'objects' such as concepts, issues, things, processes etc of common interest), has been crucial to the 'growth' of the Association: it, has been important to start to better define its mission and strategy, as well as to fine-tune internal organization and communication to outside. An example of this boundary work has been the common drafting of the internal regulation which took place during 2012 or, in 2013, the collective writing of position papers on organic farming and GMOs sent to the Regional Government. Also the organization of / participation in farmers' markets were occasion to better define identities and external image as well as to reinforce communication skills.

The entry in Crisoperla of a fishing cooperative was another important learning opportunity, offering a chance to meet a more 'managerial' way of managing business and an efficient model of cooperation. The process of learning provided mutual advantage. The contacts between the fishermen and GAS have also provided an opportunity to gain awareness of the issues of sustainability, from which the choice of the Cooperative to convert to sustainable fishing. The relationship with the fishermen/women has contributed to foster the structuring of the network. By the example of their Cooperatives and also thanks to their support, in 2011 some of the organic farmers members of Crisoperla in fact formed the Cooperative 'Under the Same Sky'. The establishment of the Cooperative has been a crucial moment in the evolution of the LINSAs, as it allowed to identify the field of action more directly addressed to economic issues. At the same time, for the same reason, it has introduced an important point of internal discussion: today some members complain about the failure to achieve the initial objectives of the cooperative (platform to sale the products according to Crisoperla principles) and a certain weakness in the adherence to the the common starting ideals (solidarity, cooperation between producers and consumers).

4.4 Tasks, roles and emerging quality needs for the knowledge and skills of actors and institutions - Consequences for education and training, in particular for professional advisory systems

Within the network the need to acquire expertise on group management and organization emerges: the study circle was an opportunity to that end but it was only attended by a small group of members, while it would be important that all members had experience in this regard.

Other requirements in terms of competence are related to the figure of “animator of territory”: the network of Crisoperla grows and maintains itself only through a continuous interaction and dialogue among its different components (organic producers, consumers, associations, cooperatives). Thus, some members consider essential the training of specific figure to that end.

Another important aspect is represented by the skills to communicate with the outside world: the initiatives carried out by the association locally show its ability to communicate; despite the strong commitment, major shortcomings instead emerge in the interactions within more complex networks (e.g. national network of organic farming), where it is necessary a deep understanding of situations and (political) strategies.

The different actors in the network have identified areas of support diversified. Especially farmers are convinced of having the technical skills to carry out their activities, so that none of them require technical advisory services. The training needs that they identify are relative to normative updates (they want to organize another study circle on agricultural legislation, in particular on the procedure for access to land). Moreover, within the collective dimension of the network they have developed the need for knowledge on the “management” of groups and skills related to the function of “territorial animator”.

One of two technicians belonging to Crisoperla, president of Under the Same Sky Cooperative, asked the SOLINSA research team for technical and scientific support on the issue of price formation in the market of organic products. His idea was to organize together with farmers an analysis of the formation of price of organic products (principles, modes of price formation, etc.) in farmers' market located in Massa.

These knowledge needs are not, at now, covered by professional advisory services, which in Italy are more oriented in agronomic and marketing advice; these needs of the LINSA so imply an adaptation of the system of advisory services as well as for education and training.

4.5 Support measures which are most effective and cost efficient

The origin of this LINSAs can be traced back to the work of technical assistance and animation in the territory performed by the two agronomists, through the support of regional funds (a project on technical assistance to organic farmers financed by ARSIA - the technical agency for innovation in agriculture of Tuscany Region - which started in 2006). More recently some members of the association have turned to forms of public support only for funding a collective project for the marketing of organic products at regional level. Another effective and cost efficient measure is the one offered by the Municipality of Carrara for the organization of training activities by means of study circles: as said above, Crisoperla had two learning pathways financed, both of them significant to the growth of the network (see Appendix 1 - Organising learning pathways).

In the life of Crisoperla, however, other kinds of support seem crucial, which at the moment do not receive any external help. The function of ‘animating’ the territory carried out by the two agronomists in the initial phase of the network still continues to be important: one of them is engaged in supporting farmers on the technical and organizational sides, while the other is more engaged in cultural and political initiatives of the Association. The latter, together with Geneviève Marotel (a member with particular expertise, being a sociologist) play a valuable role in moderating the relations within the network, between producers and consumers, in recovering those relations that over time tend to be loosen, in conveying the network members to monthly meetings or initiatives organized. Through their organizational work they make an important contribution to the functioning of the LINSAs. At the same time, they play a key role as ‘brokers’, facilitating the flows of communication between the different components of the network, so supporting the processes of integration between different visions, expectations, knowledge.

More generally, the voluntary work carried out by some members is crucial to the functioning of the network: actually, voluntary work supports many of the activities carried out by the Association, such as the organization of events, information and updates on issues considered important, internal cohesion (motivation of members, interactions etc.) and external relationships (with other associations, public authorities). Some members do more volunteer work than others, and this often influences the functioning of the organization which, without the availability of these people, could not continue to operate. This issue is quite critical for the association and, at the moment, has not found a solution to the problem. A hypothesis has been to pay the volunteer work of some members by those who do not participate in associative life, but no agreement has been reached on this solution. The voluntary work of a few (such as the organization of a seminar, work at PC for writing papers and posters, sending emails) is not properly recognized in its value by those who do not participate actively in Crisoperla activities. This problem of paid/voluntary work can be a good point to be taken into consideration in defining support measures for LINSAs.

4.6 Evaluation criteria used for assessing the effectiveness and cost-efficiency of support measures that are exploited by LINSAs (at the level of policy instruments, financial arrangements)

No explicit evaluation criteria and other means are used to assess the effectiveness of the various 'inputs' used by the organization, included the few external supports and the other resources that the members have used during the growth of their activity. However, it is possible to (and the members themselves can) make this evaluation in other ways.

Looking at the direct benefits that the main members of LINSAs, namely organic farmers and consumers, received by the various types of 'support' we can distinguish:

- collective benefits (for the group), such as organizational skills, strategic capacity, Increased economic performance, greater visibility, political awareness development, capacity for interaction with local institutions;
- individual benefits, regarding both the economic sphere and the personal sphere (growth of self-esteem, capacity for reflection, ability to engage in collective action, leadership function).

Both of these two kinds of benefits are taken into consideration for this (self-)evaluation (even if implicitly). For example, it is evident the opportunity represented by the connections that the association has established with external networks: without them, it could not have participated in projects outside of its territory and would not have had the chance to support the cause of organic farming nationwide. Moreover, it would not have the legitimacy that it has in dealing with certain issues within its territory or in receiving from local public administrators the task of organizing and managing important public events. We said how crucial are the resources provided by the some members and, more generally, the importance of the voluntary work. On the other side, the weaknesses of their organisation are clear. For example, the limitations of the voluntary work, provided inter alia by a few members, are evident: the absence or reduction of commitment by one or more members results in a reduction of the activity of the association. As well as it is evident the difficulty to involve all members in the various collective activities, which in its turn contributes to make the work of the few volunteers harder.

4.7 Operational tools that AKS actors (policy actors) could use to improve support for LINSAs and to enhance the capacity of involved actors, in order to foster successful LINSAs

The operational tools that policy makers could use to support Linsas to improve their effectiveness and to make them successful should be placed within the

strategies for research and rural development of the European Union, and then filter down to local level, in the operating context of LINSAs.

For LINSAs like Crisoperla, the support should be addressed to support the formation of capacity to build relationships with different actors; to cover the cost of work for the functioning of the organization; to promote collective strategic capacity and cooperative relationships between producers, between producers and consumers and other actors (including institutions) in order to carry out joint projects. With regard to the tools needed, these could result in funding projects aimed at the co-organization (that is through participatory methods) of training activities, addressed to enhance the knowledge and the skills of all the types of actors involved - producers and consumers and related organizations, technicians of advisory services, CSOs, public institutions and administrators -; the co-organization of public events (fairs, seminars) addressed to spread the knowledge on specific issues; the exchange of knowledge and experience among peers, at local level and also with similar experiences outside the territory; the co-construction of projects of cooperation.

Specifically, according to the new regulation proposal on rural development, this type of support might find funding under Articles 15 (training and information), 16 (advisory services) and 36 (cooperation). Conceived as described, these measures could, in different territorial realities (national and local), involve proactively different AKS actors in supporting LINSAs:

- research and training institutes: collaboration to provide the appropriate tools for training;
- advisory services: receiving specific training on the issues of territorial animation and cooperation, they could perform the function of technical assistance more geared to the needs of the network, being thus able to fully perform the function of innovation brokerage;
- CSOs, which could contribute to animate local communities and act as intermediaries between different components;
- policy makers: as partners in these cooperation projects and co-actors of systems of collaborative governance (Ansell and Gash, 2007).

5 CONCLUSIONS

The research conducted for the study of this type of LINSAs highlighted many aspects and factors which have proved to be crucial to the consolidation of this organization and to its role as agent of transition to sustainable agriculture. Crisoperla's contribution in terms of innovation is related to the nature of relations between the actors of the network and to the potential of the agency developed. At the basis of the latter there is the socially acquired sharing of common representation of sustainability, in all its values and goals: social - improving the living conditions of farmers and consumers according to principles of social justice, food security and safety; environmental - organic farming spreading and biodiversity protection in opposition to the model of industrial agriculture, and a more general conservative approach in the use of natural resources in all the

economic and social activities, according to an alternative model of development; economic - profitability of the production activities and so durability of these alternative pathways.

We fruitfully analyzed the structure, the mechanisms of functioning and governance, the innovative and learning potential of this LINSAs, getting interesting insights.

The main constraints of this experience appear connected with the management and organizational aspects, from the way to face the need of work to the internal governance mechanisms. About the latter, the management model chosen proved not to be the best solution for the governance of the network: the highly informal and decentralized decision-making (everyone must know everything and the decisions have to be taken collectively) makes the process inefficient and sometimes hinders decision-making capacity. This can be considered, more generally, a constraint to the success of LINSAs.

The key for the functioning of LINSAs and the main opportunities for their success are to be found in the learning dynamics which develop within hybrid networks and the related multiple relational spaces. The features and the experience of Crisoperla show the importance of these multiplicity of relationships to define and achieve sustainability goals: collaboration among farmers, between these and concerned consumers and, more generally, civil society; the encounter between the world of production and consumption and other areas of social mobilization and citizenship; the new forms of interaction between new food networks and public institutions. Within these relational spaces the 'boundary works' around specific objects appear crucial to the development and sharing of new knowledge and, on that basis, the formation of new attitudes and practices.

The innovation potential of this LINSAs appears strongly conditioned by the presence of a suitable governance environment. The relationships with public actors prove to be particularly significant for the impact that it can have in terms of promotion of change. Experience such as this confirms the importance of the new forms of governance emerging around food and food-related issues, which see the organization of civil society aim to play an autonomous and pro-active role in the relation with political and institutional spheres (Renting et al., 2012). The features of this kind of experiences also provide elements for defining effective forms of support. The main needs for support concern the improvement of the network building capacity and the related learning processes, strongly based on peer-to-peers exchange and on boundary works; the enhancement of the effectiveness and efficiency of network internal management, through definition of suitable governance mechanisms; the availability of tools to support the development of collective strategic capacities, the definition and implementation of joint projects and cooperative initiatives; the capacity and possibility to realize exchanges with other similar experiences.

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APPENDIX I

Methodology and research activities

Program of Workshops and methods

Workshop 1

SOLINSA Project

9/11/2011

1st Workshop Program

Cooperative "Tea Leaf", Carrara (MS).

Participants:

From SOLINSA team: Gianluca Brunori, Elena Favilli, Adanella Rossi, Giaime Berti.

From Crisoperla: Geneviève Marotel (GAS Castelnuovo Magra), Air and Earth organic farm (Teresa e Francesco), Franco Giangrandi, Angela Ulivi (agronomists), Clara Gonnelli (ACU), Giulietta Mulini (Crisoperla President), Lucetta Corona (Il Tulipano farm), Giovanna Zurlo.

Objective of the day: presentation of the project, sharing of the research program with LINSAs members

Workshop 2

14/5/2012

Innovation in Crisoperla

SOLINSA video projection (2 min)

Introduction on the topic

Method: mind map and completion of the map by the participants with the use of post it to be placed in the three "branches".

COSA (what): what's the meaning of innovation (10 min)

COME (how): thinking about the meaning of innovation, how did it come to innovate (individual or collective dimension)

DOVE (where): positioning of post it related to "what" within the network of the individual relationship (to be attached to "where") (relational dimension) (15 min).

Validation of the network

Presentation of the network: integration and sharing with the participants

Method: shared network analysis

Workshop 3

15/11/2012

Participation in Crisoperla monthly meeting

Topic: discussion on internal rules of Crisoperla and Aspects of governance

In Crisoperla mailing list has circulated a new version of the regulation on which Crisoperla is working, the document shows the statute of the association and a proposed operating rules (regulation) to discuss. The document was produced during the study circle on the consensus method which was attended by some members of the Association, including Patrizia Ulivi and Pellini, Genevieve, and Terry and Francis. Before the meeting had been requested to submit observations, comments, suggestions to Patrizia Pellini, which would have to collect the various observations and make a new proposal to be discussed at the meeting. A contribution of our research group could be to facilitate group discussion on the draft regulation. Support from people not directly involved in the argument could support the group to discuss more efficiently.

Method: thesis

The draft of each article of the Regulation (latest version) is shown, individually, on a blackboard, a billboard or projected. Participants are asked, through postcards or adhesive post it, to comment on the proposals - if they agree, more or less agree, tend to disagree or totally disagree - putting post it in the appropriate part of the table. If they all agree on one point, we proceed to the next article.

Article of the regulation			
++ Agree	+ More or less agree	- Tend to disagree	-- Totally disagree
Reason	Reason	Reason	Reason

For the points on which there is disagreement, it asks first to those who have opted for the category with the lowest number of "votes" to express their opinions and comments or alternative proposals are shown in the table below; the idea is to encourage participants to take a clear position in relation to the content of the regulation. In this way you can figure out where the group is in agreement and where not. Furthermore, motivations and proposals are collected in a systematic way and then can be implemented in a new regulation draft. Although it is not likely conclude the discussion in one meeting, the method could be repeated in other occasions where the association wants to tackle the topic again.

Workshop 4

06/04/2013

Participation in Crisoperla event: conference “GMOs no thanks”
 As IV workshop, we decided to assist the association in the organization of a cycle of conference titled “GMOs no thanks”, dealing with the risk associated to the diffusion of GMOs crops in Tuscany, Italy and Europe.
 We participate as observer in the first event organized in Carrara and as speakers in the third one in Fivizzano.

Workshop 5

13/06/2013 — Tea leaf Cooperative – Carrara

Objective

Collective analysis of the history and of the evolution of the network in order to find critical moments and think about future perspective for the LINSAs.

Methodology

- 1) Shared analysis of the paper “The emerging role of Civic Food Networks: the case of Crisoperla”.
Method: ppt presentation + open discussion
- 2) Identification and sharing of salient moments of the history of the network and comments, interpretations by the participants – Question: *What were for you the most significant moments in the history of your network?*
Method: time line
- 3) Future perspectives of the "project" Crisoperla: from the shared analysis of the highlights of these years to the identification of possible strategies for the future - the maintenance of LINSAs, relationships with institutions and universities.
Method: brainstorming

Guidelines for interviews

Guidelines for interviews with farmers/cooperatives

- 1) Story of the farm
 - Critical points: initial investments the decision to convert / choice to make organic farming since the beginning etc
- 2) How has approached Crisoperla
- 3) Which activities devote him/herself mainly
- 4) What are the benefits arising from membership in Crisoperla
 - Economic benefits;
 - Social benefits;
 - Self – esteem.
- 5) What are the benefits arising from membership in cooperatives Under the Same Sky
 - Economic benefits;
 - Social benefits;
 - Self – esteem.
- 6) Examples of innovation on farm
 - Organisational
 - Technical (new crops, new products)
 - New marketing techniques
 - New markets
 - (ask for details about one of these options)
- 7) To what extent the farm/cooperative considered itself innovative.

Guidelines interview with GAS and consumers

- 1) Relationship between Crisoperla and Cooperative Under the Same Sky
- 2) How did you get to Crisoperla

- 3) Time dedicated to Crisoperla
- 4) At what activity he devoted him/herself mainly (role, activities)
- 5) What other network belongs (other association, Farmers' Unions etc)
- 6) What are the benefits arising from membership in Crisoperla
 - Economic benefits;
 - Social benefits;
 - Self esteem
- 7) Evolution, critical points, current situation

Insights

History of the LINSIA

“Crisoperla” – free from parasites is an association aimed at supporting organic farming and, more generally, sustainable lifestyle. It involves organic farms, consumers' groups, other consumers' associations and technicians. It is located in an area at North of Tuscany (the province of Massa-Carrara), and partially, in the territory of the neighbour Liguria region.

The association was created in 2010, but the case starts some years before.

To that regard, the role of two agronomists, Franco Giangrandi and Angela Ulivi, experts on organic farming, was crucial. In 2007 they started their collaboration by giving technical assistance to organic farms in a project funded by Regional Government of Tuscany. Working on this project they observed that, despite the fact that most of the farmers (now members of Crisoperla) lived a few kilometers away from each other and carried out organic farming, they had never met each other.

As they followed a course on communication and project planning (funded by the Regional Government too), they appraised the potentialities of group management. So, after the course they started to get in contact with farmers and honey producers of the area of Massa.

Thanks to Angela and Franco, these producers started to meet periodically and soon consolidated to a number of ten, between farmers and technicians, and started to share information and experience about their way to cultivate, the input used, the selling of their products and so on. The first outcome of this relational activity was the organization of the collective purchase of organic inputs (seeds and seedlings, fertilizers, *Bacillus Thuringensis*, etc.) because of the lack of these products in the area at that time.

Thus, at the beginning, the activities of the group had a clear technical orientation: the group consisted mainly of farms and the prevailing need was to have the tools to do organic farming and, consequently, to sell products. Since the farms were small/medium size, they carried out mainly direct selling, on farm or participating autonomously in some farmers' market of the Province.

To help the farmers' group to broaden the opportunities for sales, Franco and Angela entered into contact with the GAS (Solidarity-based Purchase Groups) of Massa, with the intention of opening a new market for the farmers. The partnership was established and this marked a turning point to the farmers. Moreover, the GAS, together with other local associations, helped them to enter other farmers' markets in the Province territory. Another important milestone has been the link with a local fishermen cooperative, “Maestrale”, engaged in adopting sustainable fishing¹ techniques and already linked for the direct selling of most of the fish to GAS, at that time located in Tuscany.

The relationship with the GAS, since 2007, had been significant to this Cooperative. It had been a source of enrichment for fishermen: some of them had become members of GAS in order to learn more about solidarity principles and local food provisioning and,

on the basis of that experience, had changed their idea on fishing and started to think about how to contribute to the “sustainability cause”. Thanks to these contacts the whole cooperative had decided to turn to sustainable fishing. After this choice they had got in contact with other GAS, outside Tuscany too, and broaden their space of activity.

This represented an opportunity for the group of farmers as the cooperative offered them to propose some of their products, such as olive oil, wine, honey, to the GAS they supplied, especially outside Tuscany. In parallel, five girls working within the cooperative, supported by the President, Giuseppe Maffei, decided to organize independently and formed another cooperative, Bio e Mare (Bio and Sea), addressed to fish processing using ingredients (i.e. olive oil, tomatoes, etc.) from organic farming. This represented another opportunity for the group of farmers because they started to supply the “fisherwomen’ cooperative”.

So, these relationships were important for the group of farmers because through the two fishing cooperatives farmers could reach more customers for their products. Moreover, the possibility of logistical support for marketing stimulated reflections among group’s members (at the time informally linked) on the need to create a platform for the marketing of the group’s products.

The link established between the group of organic producers, the fishermen’ cooperative, technicians and consumer groups, based on the fact that they share the same values (promoting more sustainable way of producing and consuming and a more sustainable way of living in general), brought the actors to formalize the relationship: in 2010 Crisoperla was founded and soon it included 15 farmers, 4 GAS, the cooperative of sustainable fishing and the two technicians.

The first important test for the newborn Crisoperla was the participation in “Tutta un’altra Città” (Another town altogether), a fair on sustainability and solidarity economy organized once a year by the homonymous association (TUAC), a second level association working in Massa, whose president is a member of GAS Massa, Paolo Menchini. In 2010 edition Crisoperla was involved to animate the communication activities (workshops, seminars) and to manage the catering space by using the farmers products.

This experience represented a great opportunity for Crisoperla from the point of view of visibility, but also for the relations established: the Association became member of TUAC, became part of the management committee of some farmers’ markets and acquired new members, as a consumers association (CUA, Consumers-Users Association) and a GAS of Castelnuovo Magra, a town of Liguria (a neighbour region, at North West of Tuscany).

In addition to the network of relationships Crisoperla has extended its area of action too: thanks to the adhesion of the Ligurian GAS, some Ligurian farms became member of Crisoperla, especially in the area of La Spezia Province.

After the establishment of these relationships, during 2011 Crisoperla was involved in public initiatives in Liguria region, both of commercial and cultural nature: it entered the farmers’ market in Sarzana and participated in “Fa la Cosa Giusta” (Do the right thing, the same that TUAC in Massa); moreover, at institutional level, Crisoperla started to be involved by the Ligurian Government in drafting a regional law on solidarity economy together with other CSOs..

During the same year, 2011, Crisoperla was contacted by our research group to attend the three-year EU Research Project SOLINSA, aimed at defining strategies for supporting LINSAs, innovative networks addressed to sustainable agriculture through social learning and knowledge co-production. The University of Pisa chose Crisoperla as one of the Italian LINSAs case studies and this represented a further opportunity for the association to be known and to strengthen links with part of the world of research.

Crisoperla aims at assuming a political role and it is working in this direction: in 2011 the President of Crisoperla became a representative within Up Bio (National Union of Organic Producers), a new national Union with functions of representation for organic

farmers. This role enlarges the area of relation of Crisoperla, which gains visibility at national level.

A fundamental step in the story of Crisoperla occurred at the end of 2011: the foundation of a Cooperative, “Sotto lo Stesso Cielo” (Under the same sky). The project was carried out by the two technicians, and five of farmers/producers of Crisoperla led by the fishermen’ cooperative. The aim of Under the Same Sky is to better manage the marketing of products and the participation in farmers’ markets, the purchase of the technical inputs for organic farming and all those activities most closely linked to the production sphere, including technical assistance. Franco and Angela have key roles as, respectively, Cooperative President and Vice – President.

Comments on methods section

As described in “method” section, in Crisoperla we use a combination of tool and methods to study LINSAs characteristics and to facilitate learning among our team and them. SOLINSA team had more than 5 moments of encounter and engagement with the LINSAs, including participation in meetings and public initiatives.

During the 5 workshops, we tested with them several tools to work with participants. For the 1st workshop we presented the project and discuss and share with them the program for the next two years. There were not specific characteristic to explore, so the open discussion on Project main themes was useful. The focus group method was functional to explore the LINSAs conception of innovation and to make them realise (through discussion) that, for most of them, innovation in Crisoperla is related to the nature of relations between all the actors in the networks (producers, consumers, agronomists), really new in their territory.

The shared network analysis was another successful tool used in our LINSAs. We presented participants our interpretation of network structure visualizing it in a pictures (done with a program for visualise network, VisOne): participants validate our interpretation integrating and modifying those ties we considered in a wrong way or those one we skip in our analysis. Other workshops had a few numbers of participants, despite we invited all members several days ago and shared with them the date: this led us to adapt the tools that we had planned to use to their specific needs. The methods planned (discussion, time line and brainstorming) for last Workshop worked only partially well because of the tendency of some members to talk without respect the rules of the discussion and because they tend to focalise only on those aspects they consider most important. These aspects made the discussion usefull but not organised as we planned to do.

As we described above, It was difficult to apply the workshop learning methodology to work with Crisoperla. For us other modalities of interaction with LINSAs were more useful, such as targeted focus group, interviews, as well as collaboration to the public initiatives organized by them. The collaboration for the definition of the contents, the interaction and exchange of opinions have contributed most with respect to other methods, to facilitate learning in Linsas. They became aware, for example, of the need to improve their organizational and management skills, including the modality of relation and dialogues with institutions. This is a very critical aspect, because those members of Crisoperla that interface with the institutions often fail to control the vehemence of character.

Also for our team other kinds of interaction were most useful from a learning point of view: in this year we learn to adapt our research needs to LINSAs needs, to adapt the scientific language to their language to make the concepts really understandable. The analysis of their communication flow and the involvement in some of their activities most then the workshop methodology made us understand the support needs of the LINSAs, from organisational and training points of view.

Internal regulation

An example of how the decision making process is triggered by Crisoperla is the drafting of the rules of the association; the intent is to create a set of working rules relating to the principles and general rules contained in the statute.

A group of members of the network, in the context of participation in a course on "group management and consensus method", has developed a draft regulation starting from the rules of the statute of the association; the decision-making process on the issue was at first activated by spreading the draft document on the mailing list for comment and summoned, later, a monthly meeting in which discuss it and decide on the content. No comments have been presented and the meeting was attended by only those who have prepared the draft. The participants decided to convene a new meeting on the matter, with the same results in low participation. The draft regulation proposed by the working group was approved without further discussion with the other members in the annual general assembly of the association.

Organization of events

The decision-making process behind the organization of an event is generally the following.

When a member of the association receives a proposal for the organization of an event, it is shared, in the first instance, in the mailing list, in order to receive comments on the appropriateness to join or not.

The final decision is taken during a monthly meeting by participants and, once decided on the participations, is activated the organizational phase. Generally, the President, technicians and representatives of GAS assume leadership roles in the organization process while the other members are enabled to work at the time the of the event.

Generally, the technicians, and representatives of GAS deal, after sharing with the rest of the group, the thematic areas o be developed, more about informative aspects related to an event (organization of seminars, preparing information materials, documents for local printing etc.), while the President (producer) and the other producers (in function of time made available for the initiative) collaborate in the organization of any exhibition spaces or markets.

Below is described an example related to the organization of an event of two days in Fivizzano (MS).

"Lunigiana Bio", an association of organic producers belonging to one of the main Farmers' Union in Italy (Coldiretti) has always managed the organization of an event related to enhancement of the territory on the Fivizzano: for the 2012 edition this organization decides to involve Crisoperla in the management of cultural spaces (2 meetings) giving the ability to self-manage a space of exhibition market.

The head of Lunigiana bio and the Mayor of Fivizzano contacted the President of Crisoperla to involve the association in the initiative and the proposal has been welcomed by all members and considered a great opportunity for the visibility of the association.

Once obtained the share of the group, has begun outlining the organizational figures: the president, along with one of the two technicians and a representative of a GAS, participated in the preliminary meetings with the mayor and head of Lunigiana Bio to agree on the topics of conferences and the organization of the exhibition market; the outcomes of the meeting were communicated to the others through the mailing list. To define the more practical aspects were held meetings in addition to the monthly in the month preceding the date of the event.

The representatives of the GAS, the technicians and the president took care of the content aspects of the conference, brought speakers and proceeded to send official letters of request for participation; have also prepared some documents to introduce the topics under "discussion" ("where the solidarity economy goes" and "organic farming, I think so") that have been shared with the rest of the group through the mailing list.

The president, along with the other technicians and those producers who have given time for the initiative, was also in charge of preparing the exhibition market, organizing shifts to stand there and dealing with the hospitality of exhibitors coming from outside the area.

Decision on proposals coming from personal relationship of Crisoperla members

Often the members of the network receive proposals for activities from contacts activated through their individual networks of relationships. If Crisoperla is involved, the process of decision is organized as follows.

Who receives the proposal shares it with the group (mailing list in the first instance and then monthly meeting) to ensure that there is agreement about it. After that, starts the organizational phase, usually managed by people who received the proposal at the beginning.

As an example of the process, follows the description of the process behind the visit to Crisoperla of some farmers and consumers belonging to the group of "Paniers Marseillais"

The initial contact there was through Geneviève (GAS representative), thanks to her relationship with an Italian anthropologist who works at the Ecole des Hautes Etudes, who lives in Marseille and is part of the AMAP.

The idea of traveling to get to know Crisoperla came from a farmer of the French group, Robert Russier (farmer and technical assistant of Paniers Marseillais); the aim of the visit was to promote the peer to peer exchange between farmers through visits to Crisoperla farms, walks in the countryside and debates.

The organization of the visit was followed by Geneviève, Patrizia Pellini and Patrizia Ulivi (respectively 2 gas representatives and one technicians); Geneviève in particular was responsible in the first person of the organization of the three days (accommodation and meals for guests, farms and cooperatives to be visited, etc.) and of the accompaniment of guests during the visits, also dealing with simultaneous translation Italian / French.

An invitation to participate was sent to all members of Crisoperla that responded in a positive way, participating in farms visits and in moments of conviviality.

Organizing learning paths

In 2012 the municipality of Carrara has published some calls to fund study circles addressed to associations operating in the area.

The proposal was presented by Patrizia Ulivi, Geneviève Marotel, Elena Panei and Crisoperla decided to participate. During a monthly meeting were presented some ideas on issues around which to organize this study circles: permaculture, agricultural legislation, organic farming, group management and consensus process.

After the meeting, Genevieve and Patrizia went to ask for information to the responsible of the Municipality regarding the submission of requests and organizational aspects. Through a discussion on the mailing list, it was decided to submit a request for four courses: two on communication (internal / external consensus method), agricultural legislation and permaculture.

The courses for which they have received funding were finally two: group management and method of consensus and agricultural legislation.

Patrizia Ulivi, Elena Panei and Genevieve Marotel have organized the course on communication and management groups and jointly managed the relationship with the Municipality: Patrizia Ulivi has dealt to solicit accessions and to collect them, to propose topics of interest and select curriculum for the selection of teachers.

Regarding the study circle on agricultural legislation, Elena Panei has dealt to select the teacher and to propose a schedule of topics to be addressed.

In the month of March has regularly carried out the course on communication and consensus method, with 11 participants, while the course on agricultural legislation has not done yet.

Fishermen/women Cooperatives

To the network of Crisoperla belong two cooperatives operating in the fisheries sector, called Maestrале (Mistral) and Bio e Mare (Bio and Sea).

The Cooperative Maestrале is made up of fishermen and adopt sustainable fishing practices (is currently in the certification process): distinguishing feature of this cooperative is that, apart from an initial period in which performed selling fish wholesale, it always made direct selling, both with a bench at the port of Carrara and GAS.

The relationship with the GAS, since 2007, had been significant to this Cooperative. It had been a source of enrichment for fishermen: some of them had become members of GAS in order to learn more about solidarity principles and local food provisioning and, on the basis of that experience, had changed their idea on fishing and started to think about how to contribute to the “sustainability cause”. Thanks to these contacts the whole cooperative had decided to turn to sustainable fishing. After this choice they had got in contact with other GAS, outside Tuscany too, and broaden their space of activity.

This represented an opportunity for the group of farmers as the cooperative offered them to propose some of their products, such as olive oil, wine, honey, to the GAS they supplied, especially outside Tuscany.

In parallel, five girls working within the cooperative, supported by the President, Giuseppe Maffei, decided to organize independently and formed another cooperative, Bio e Mare (Bio and Sea), addressed to fish processing using ingredients (i.e. olive oil, tomatoes, etc.) from organic farming. This represented another opportunity for the group of farmers because they started to supply the “fisherwomen’ cooperative”.

So, these relationships were important for the group of farmers because through the two fishing cooperatives farmers could reach more customers for their products. Moreover, the possibility of logistical support for marketing stimulated reflections among Crisoperla’s farmers on the need to create a platform for the marketing of their products. The establishment of the relationship with the fishermen cooperatives has been an important source of learning for the development the network. On an organisational level, it has represented an example of a more structured experience of collective management, both of the ‘production’ activity, driven by shared principles of sustainability, and of the marketing, inspired by an alternative approach to the ‘market’, looking for a more profitable and satisfactory direct relationship with consumers. On a practical level, it has helped the organic farmers to get their supply more attractive to consumers, has provided another outlet to the farmers’ product (as ingredients of the processed sea food) and has widen their commercial relationships by introducing them to new GAS, also out of the area. On the whole, this has created new economic opportunities and visibility for the farmers’ group, as well as it has contributed to foster the structuring of the network; by the example of Cooperatives and also thanks to their

support, in 2011 was formed the Cooperative Under the Same Sky, that it is the business unit for some of the organic farms that are part of Crisoperla.

Experience of peer-to-peer exchange: Paniers Marseillais' visit

In the period from 7 to 9 November 2012 some organic farmers and consumers of the "Panier Marseillais" (<http://lespaniersmarseillais.org/>) came to visit the territories of the province of Massa to know the reality of Crisoperla (for organization of the event see box 3). The intent was to learn how works a reality similar to them (association of producers and consumers) in different socio - economic and geographic context. During the stay in Tuscany, the delegation visited farms and cooperatives (social, fishermen and laboratories herbs) belonging to Crisoperla, with opportunities for exchange of information and curiosity related to production techniques, marketing channels and elements of contractual relationship between producers and consumers. Members of Crisoperla were impressed by the organization of the French group, wondering how to implement some elements that characterize the relationship between consumers and producers in the reality of which they themselves belong.

This experience was significant for both groups, and through the representative of the Ligurian gas through which contact is on, they expressed the will to carry out joint projects.

Drafting of a policy document

Interaction facilitate processes of learning: as an example, we reconstructed the processes behind the drafting of a policy document that we can bring back to the process of participation and reification passing through a boundary object.

The progressive growth of Crisoperla and the extension of the network of relationships, made necessary reflections among members: who we are?, what we want? and where we want to go? are the key questions at the basis of their process of definition of a common identity.

The entrance of the Association in Up Bio has somehow accelerated this path: Crisoperla had to produce a document to be presented in Rome at an Union meeting containing ideas, suggestions and requests related to organic farming.

The members tried to organize the drafting of the document constituting a working group whose members were technicians, GAS and farmers: within the group the role of Genevieve was crucial, as a consequence of her profession of sociologist and as representative of a GAS. The group drew up a draft document which, once shared with non-participants in the working group, immediately gave rise to a heated discussion.

Some farmers didn't feel sufficiently represented and openly highlighted the difference in priorities among the components of Crisoperla, especially among producers and consumers.

The main point of discussion was the language with which the document was written: according to some farmers, the attempt to make it suitable for mediation with Institutions penalized its incisiveness, making the current difficulties of doing organic agriculture and the urgency to find solutions to support organic farmers less evident. For producers, "doing organic agriculture" is a job, while consumers have another vision and this makes inevitable the diversity of perspectives inherent to the problem.

After these initial discussions the document was circulated in the mailing list, and was commented and integrated by those who wanted to intervene. At the end of this shared process all have agreed that it represents who they are, what they want and where they want to go.

The document, entitled "Proposals for organic farming", is organized into 13 points that focus on problems of the organic sector perceived by Crisoperla: the first part contains proposals to promote and support organic farming and the second one includes instances related to solution of the most frequent technical and operational issues.

The document has become an element of identity and is used as an interlocutory tool to talk to the institutional world. These were the words of a farmer, member of Crisoperla, regarding a meeting scheduled with the Tuscany Administration, and he was initially more than others complained that the document was not sufficiently representative of the farmers:

“to the meeting I would take also the famous document approved by all, to leave something written about who we are and what we want” (Francesco, organic farmer)

So, giving themselves an organization, they produced a shared document that represents them and that becomes a tool to make known the network and to communicate with the outside.

Relationship between the agronomists and the AKS

The story of Crisoperla begins thanks to the activities carried out by two agronomists in the Province of Massa. Both of them worked for more than ten years in the field of technical support services to farms which had been activated by the Tuscany Region and, later, as part of a regional project on the promotion and valorisation of organic farming. Their activities were addressed to support farms from an agronomic and commercial point of view, considering the needs of the single farms. In carrying out this work, they have realized that organic farms distant a few miles did not know each other, working isolated without knowing what their neighbors were doing. This, in their opinion, was a big limitation to the development of the area (part of the Province of Massa, Lunigiana, is considered a 'marginal area', less developed than other areas) and for the farms themselves: in the opinion of Franco Giangrandi and Patrizia Ulivi, knowing each other, exchanging experiences and knowledge as well as working together to improve the situation of their own territory were farmers' attitudes to be encouraged, but the traditional form of technical assistance was not able to do that. Moreover, encouraging the interaction among the farmers seemed to them the most promising way to enhance the technical consolidation and the economic performance of organic farming, especially regarding the purchase and the use of inputs and the marketing of products.

So, the two agronomists decided to independently pursue this form of "animation" on the territory, outside of Farmers' Unions and of associations for organic farming. This activity has led over time to the birth of Crisoperla.

Currently, the two agronomists are not engaged in providing technical assistance to farms, but rather to increase their commercial opportunities (one of them is the president of a cooperative formed by the producers of Crisoperla) and their visibility in the territory.

Evolution of the relationship with Farmers' Unions (especially with Coldiretti)

In Italy there are three Farmers' Unions. In the territories where Crisoperla operates, one of these (Coldiretti) in particular plays a key role, also at political level. Organic farmers that are part of Crisoperla (and the association itself, as a whole) have always had a critical opinion of Farmers' Unions: they don't consider appropriate the type of support that these organizations provide to organic farming and think that, for political reasons, these organisations are more interested in less sustainable forms of agriculture.

Especially at the local level Crisoperla has always contested the mode of action of the Farmers' Unions, especially Coldiretti, that, according to them, are interested only in having political "control" of the territory without having at heart the real interest and welfare of the farms.

From one year to now, however, the relationships are partly changed. Crisoperla is becoming an association engaged in organic farming which is known in the area, despite not yet having large numbers at the level of members. For this reason, the local organization of Coldiretti tried to get in touch with the association to jointly organize a number of initiatives related to agriculture in the territory of Lunigiana. In particular, during the 2012 edition of a three-days event on sustainability which traditionally takes place in the town of Fivizzano, the local farmers' union has requested the participation of Crisoperla, for the organization of a farmers' market and of some conferences. The experience will be repeated in June 2013.

Relationships with organizations of organic farming

One of the main objectives of Crisoperla is to help to strengthen a more rigorous and effective approach to organic farming, both locally and in the policies at higher level. This aims also translates into action to pressure the organizations of the organic sector, which Crisoperla asks for greater political incisiveness and an effort to bring forward a unified strategy to support the sector.

For this reason, since 2011 Crisoperla is a member of UpBio, a national union of associations of organic producers recently established, founded with the aim to join forces to improve policy making. The presence in UpBio has allowed the consolidation of relations with other associations representing organic farming, which are not farmers' unions. This cooperation has not established only at national level but also, and especially, at the local level, such as in the case of the organization of public event on the introduction of GMOs in Italy and Tuscany.

Relationship between Crisoperla and Pisa University

The relationship between Crisoperla and the University of Pisa began with the Project SOLINSA. Previously, our working group had collaborated with some of the members of the network in other research projects on organic farming, but the interaction with the network as a whole began with SOLINSA.

This collaboration has been seen as an opportunity, given the particular phase in which the association is engaged: a process of redefinition and reorganization of its mission both internally, in relation to different fields of actions, and externally, in the relationships in the area and over. The thinking proposed by the project has been so interpreted as an opportunity.

In addition to the activities under the project, the University team is for them a source of knowledge concerning their issues of interest. Over time, they asked the team scientific material, as e.g. on the rules for the formation of prices of food in short supply chain (to organize training sessions for citizens who attend a farmer's market that they manage) and, more recently, support for tackle the problem of damage to crops caused by ungulates. In addition to this, there has been the collaboration to conduct public events on topics related to sustainability.

The University of Pisa is the only structure of the AKS that, by the time, they consider adequate to their needs in terms of knowledge and with which they have established a relationship of interaction for the construction of new knowledge, both internally and towards the outside.

Crisoperla and the network of Solidarity Economy

One of the areas in which Crisoperla is working on, at a cultural and operational level, is that of solidarity economy, based on principles of solidarity and sustainability. The decision to propose a public debate on this issue comes at a time of growing interest about it in Italy. Not only the initiatives promoted by the various movements that adhere to its principles multiply and grow in visibility, but there is also a growing interest by public institutions and policy makers, business and professional organizations, as well as by the world of culture and media.

The relationships established within the Italian networks of economic solidarity, represent a tool to gain knowledge, share ideas and projects, be up to date on the major awareness-raising actions and events that are realized within the network. Each member of Crisoperla has shared its personal relationships within these networks, making them become assets of the network itself.

Among the major organizations with which Crisoperla has established relations at the national level are:

Iris Bio Cooperative - an important cooperative of producers and consumers in Northern Italy (Cremona, Lombardy), which has been working for 34 years in the production and distribution of organic products; an organization deeply involved in the debate on the characteristics of organic farming and its development (it was one of the founders of AIAB, the Italian Association for Organic Agriculture), in education activities and training on organic farming. Is an active member of the national network of solidarity economy. Its president, Maurizio Gritta, is a prominent figure of the Italian organic sector, with great management skills, cultural depth and charisma, and with him Crisoperla has established collaboration for the organization of public events on their territory.

Happy hens consortium - a consortium which includes producers of Sicily who since the early 2000s have undertaken the direct marketing of their products (mainly citrus), by establishing relations with GAS (Solidarity Purchase Groups) in central and northern Italy; in 2007, the consortium was one of the founders of Siqillyàh, a network (of not only producers) engaged in promoting the development of relationships among actors who want to free themselves from the "constraints" that characterize the Sicilian context and realize alternative forms of management of business relationships (direct, guided by the ethical principles); promoter and animator of RESSUD (Network of Solidarity Economy of the South) and an active member of the national Solidarity Economy Network; it promoted 'Sbarchi in piazza', a travelling initiative at national level aimed at providing opportunities of thinking and socialization within the context of a farmers' market (producers of oranges from the South together with local producers). The collaboration of Crisoperla in the organization of the first edition of 'Sbarchinpiazza' in 2011, just in the town of Massa, represented an important opportunity to bring in the area a very meaningful experience and gave the association the opportunity to expand its networks of relationships.

This growth of the capacity of interaction has had effects also at the local level, with the recent strengthening of ties with other organizations in the area. Among these, the collaboration started with organizations of the nearby Liguria region, engaged in a process of negotiation with the regional government for the establishment of a regulatory framework for the solidarity economy, has been particularly significant. Beyond the results of the process, the participation in the thinking that has developed has represented a great opportunity for a development of knowledge and of ability to interact on these issues.

Specifically, Crisoperla is part of ReAltra, the "Network of Liguria and Apuana region for the alternative economy", that is a network made up of active members in the Gas movements and local committees. Formed in 2011 following the organization an event

on solidarity economy (“Do the right thing”), the group decided to consolidate in order to deepen knowledge and collaboration, creating ReAltra: the network now consists of organic farmers, consumers of GAS, teachers, doctors and, in general, people looking for a "different style of life". ReAltra goal is to promote processes of awareness and knowledge building in favor of cultural and economic projects ethically-oriented; to that end it organizes public events, seminars and other cultural activities. For Crisoperla the contact with ReAltra has represented another important space to develop new opportunities and knowledge, enhancing the awareness of the importance of interacting with other networks in other territories sharing the same values of solidarity and ethics.

GMOs - No thanks

In March 2013, some members of Crisoperla decided to organize a series of dissemination events on the issue of GMOs in the light of recent regulatory implications, namely freedom left to the EU States to decide on the possibility of cultivation or not. In the absence of specific rules that regulate the coexistence with conventional and organic crops, these members felt the need to raise public awareness, starting from their territories, and to confirm Crisoperla opposition to GMOs.

The idea was conceived by a small group of members of Crisoperla (Giulietta Mulini - President, Patrizia Ulivi and Patrizia Pellini, Geneviève Marotel, Ettore Gregorini) and has assumed a special significance in the life of the association, because of a certain 'tiredness' that was characterizing some central members and, consequently, the whole organization. Around the common reaction aroused by this event and the desire to mobilize to spread knowledge around the topic and to organize some form of protest or 'resistance', the activity of Crisoperla started again.

The program is to organize a series of public workshops in several municipalities in the provinces of Massa Carrara and La Spezia structured in this way:

- a first part dedicated to the issue of GMOs, approached from different points of view: regulatory, relationship between consumption and health, relation between GMOs and the environment;
- sale of products of farmers of Crisoperla and of the cooperative Under the Same Sky;
- exchange of seeds self - produced between farmers.

After the first workshop held in Carrara, others are planned, specifically in Massa, La Spezia, Arcola, Ameglia, Sarzana, Aulla, Pontremoli, Fivizzano.

For the realization of these events, the group has fine-tuned a organizational methodology, based on division of tasks, always led by the most active group (one of the two agronomists, the sociologist, a representative of GAS, the President and another farmer). The other members, mostly farmers, give their help for the exhibition, participating at the stands of Crisoperla and the Cooperative under the same sky.

Also for these events, Crisoperla asked the collaboration of the Solinsa project team, which now seems to be considered a partner in all its cultural activities.

APPENDIX II SYNTHESIS REPORTS

DEGREE OF INTEGRATION SYNTHESIS REPORT

Methods: workshops (2), documents analysis, face to face interviews (6), 1 telephon interview, participation in some public initiatives involving the LINSAs.

What are the mechanisms of network development?

Crisoperla association represent the first step of a complex networking process. The growth of the network, its articulation with relation to the various fields of interest of actors, its hybridisation through the progressive openness to new relationships is an integral part of the development of innovation process and represents the relational space where learning processes take place.

The shared perception of some problems was the first elements fostering the interaction among actors, especially for the group of farmers: the lack of commercial opportunities on conventional channels for organic products and, more generally, the difficulties in running the production process (lack and high price of inputs) and the perceived distance from mainstream institutions about the approach towards organic farming was another important driver. A key role in this first form of collaboration was carried out by two technicians who fostered exchange of experiences among the first group of farmers. Another crucial step in the development of the network was the establishment of relationships between farmers and consumers organised into GAS (Solidarity-based Purchase Groups). From both this parts this relation entails deep internal changes because of the need to achieve new skills and to redefine own identity and responsibilities as producers and consumers.

The structuring of the network goes through two important steps: the one is the formalisation of the group of farmers, technicians and GAS in the Association Crisoperla, a crucial milestone for the consolidation of the internal relationships and the interaction with the outside. The second and more recent one is the definition of two separate fields of activity: the activities related to production and marketing, carried out by a Cooperative (Under the same sky) which includes farmers and technicians already belonging to Crisoperla, and those ones more specifically related to relational, cultural and political aspects.

What are the processes of innovation and learning and how do they occur?

Relationships, the moments of encounter and exchange of information between the different actors of the network are the main ways in which innovation takes place and where learning occurs within Crisoperla.

Members create knowledge through shared practice (especially farmers) and this suggests that social learning is taking place. The fact that the farms members of Crisoperla are all organic, facilitates peer to peer exchange, farmers consider themselves competent by a technical point of view and their experience comes from observing the practices of other farms and from their history.

This happens because the level of interaction within Crisoperla is high: there are several moments in which the actors meet and exchange their views and experience, for example during participation in farmers' markets, during the monthly meetings of the Association and at public initiatives that are managed and organized by Crisoperla. The communication that flows among Crisoperla members is in its turn characterized by a different intensity and the degree of sharing among all the members

is related to different areas of discussion. If, for example, the exchange of information is related to a technical problem on agriculture, a farmer asks another farmer for help, without addressing to the group of consumers; sometimes the issue is shared with the two technicians. So, this kind of exchange of knowledge does not involve all the actors of the network. With regard to political-cultural-dissemination topics, the passage of information and knowledge takes place among all the actors of the network, even if the level of participation in the exchange and sharing can vary. Not everyone is in fact involved in discussions about these topics which, in contrast to the previous point, occur mainly among the groups of non-farmers (some farmers participate, but they are always the same).

- Mutual engagement, joint enterprise, shared repertoire (characteristics of a COP)

The network originally built through Crisoperla initiatives is growing, changing size and shape by diversifying internally and integrating with other networks.

Looking at the organisational form assumed by this network, Crisoperla and the Cooperative can be read as a Community of Practices because they really appear as “groups of people informally bound together by shared expertise and passion for joint enterprise” (Wenger and Snyder, 2000). The network shows the presence of the three dimensions of a CoP:

- mutual engagement: is well represented by the sharing of values, the intensity of participation and the sense of belonging of its members, as well as by the consequent coherence in doing things despite the internal complexity of the relationships
- joint enterprise: this dimension characterise the internal interactions, addressed to translate into common practices the negotiation of different visions and expectations existing in the organisation.
- shared repertoire: material and immaterial resources built and/or mobilized for the negotiation, sharing and communication of meanings: routines and ways to do things (way to do organic farming, techniques etc), words and narrative, symbols (logo), codes and regulations, political documents and informative materials (flyers, policy documents drafted for the outside), space to communicate (social networks, web sites, monthly meetings).

- Participation and reification

The repertoire of Crisoperla is built through processes of participation and reification .

The association itself may be considered a first output of a process of participation in the community life by its members. The two technicians have facilitated the formation of a group of organic farms in the territory of Lunigiana that have begun to cooperate: for the purchase of technical equipment, for production planning, to approach consumers organized in GAS and start with them commercial relationships. The formalization of the relationship with GAS may represent the first example of reification.

The operating procedures for Crisoperla continue to be based on sharing. The use of mailing list and the monthly meetings are the main instrument for the realization of all activities of the association: organizing events, writing documents to present Crisoperla the outside world. The same tools are used for the formulation of texts in which members of Crisoperla collected the common principles that underpin all the work of Crisoperla: solidarity between producer and consumer and the importance

of a commitment to create a network of relations in the territory, having at its base the belief that organic farming is the only way to ensure sustainability.

These aspects were particularly evident in the production of some boundary objects (see below), including the document "Proposals for organic farming" and, more recently, a regulation, a code of rules that members have decided to adopt. This code of practices is an object of this type: as boundary object, it evolved until there was a sufficient degree of consensus that has brought to reification.

- Boundary work (boundary objects, brokers, boundary interactions)

In Crisoperla the boundary work is fundamental because Crisoperla is a fast growing network, open to connecting with other networks in order to achieve common goals: the link with another association that operates in Tuscany with organic farmers (AIAB, Italian Association for Organic Farming) allowed Crisoperla to join the management committee of a new union representative for organic farming at national level. This has allowed an expansion of relations beyond the local sphere and the President of the association, in this case, is the element of contact between different network, playing function of broker: she participates in discussions at national level and brings new experiences and knowledge to the association. But not only the President performs those functions, other actors of the network have a strong brokerage activity due to their belonging to other networks: the two technicians have ties with other associations and cooperatives linked to agricultural production and communicate what they learn to Crisoperla's farm; the same cooperative Under the Same Sky is a "boundary", a place of contact with other farms those not belong to Crisoperla); Genevieve, which is representative of a GAS, is part of numerous other groups and associations on the territory of Liguria and Tuscany and can bring in Crisoperla her experience as a sociologist by profession. The boundary interaction is amplified in these figures.

As said above, participation in Crisoperla has led to several boundary objects (the realization of which responds to the model described above), as: the logo of the association, the various documents written for different aims, the identification of common principles, the code of practices.

Should the LINSAs be considered as a COP, NOP, constellation of practice, innovation network?

As said above, Crisoperla can be read as a CoP but the openness to the interaction with other local and extra local networks is part of the evolution of the original network. Looking at the engagement for the recognition of the specificity of organic farming and of the related localised food systems, we can observe how the CoP is entering broader Network of Practices (NoP) which has the same features of CoPs but is not necessarily characterised by spatial proximity and so strong ties.

The progressive expansion of the network outside the regions of origin confirm the hypothesis that the most suitable configuration is that of NoP.

Are there any things revealed about the degree of integration that were unexpected?

What emerged from the research so far is that the active part of the network is mainly belonging to the world of consumers and less to the world of farms. Aside from the President, the other farmers seem to have some difficulty to participate actively in the life of the association: they need to be involved in a continuous way, otherwise the most of farmers tend to not participate. There is a strong belief in the importance of Crisoperla, its role and potential, but the level of participation is still quite low: farmers read the mails, are informed of the discussions but hardly intervene proactively.

Summary of findings

- Crisoperla is a learning network with great internal heterogeneity (farmers, consumers, civil society organizations) to the base of which there are processes of sharing of organic farming practices and the belief that this form of agriculture can be the only one capable of operating in the direction of sustainability.
- The relationships, the moments of meeting and exchange of information between the different actors of the network are the main ways in which innovation and learning occur within Crisoperla.
- The CoP of Crisoperla and Under the Same Sky is setting as NoP since it is tightening ties with other networks outside of the context of origin.
- The logo, common principles, policy documents and the code of rules are some of the objects of reification.
- The network is expanding. The boundary work is intense and sees the special engagement of some actors, mostly technicians and consumers, more rarely of farms.

LEVEL OF INNOVATION SYNTHESIS REPORT

Method: interviews (6), workshop (1), document analysis, website analysis, social network pages analysis, literature review.

1. Do the LINSAs display characteristics of incremental or radical innovations?

The innovation developed by Crisoperla is a radical innovation. It is in fact expression of a break with the dominant economic, political, technical-organisational and cultural patterns (conception of organic farming, relations of the farms with the market, relationships between worlds of production and consumption, forms of farm representation, conception of knowledge and knowledge building, farmers' role in society).

2. How do LINSAs support socio-technical transition to sustainability?

The concept of sustainability within this LINSAs is associated to organic farming, as well expressed by the words of one of the farmers "*sustainability is organic farming*".

The socio-technical transition towards sustainability is, at a first analysis, associated to production techniques environmentally friendly and to the safeguarding of the rural landscape perceived as a common good.

The concept of sustainability is also accompanied by the concepts of responsible consumption and of solidarity: the structured network of relationships between producers, consumers and civil society organizations is an innovative tool for the support and dissemination of these common principles (support for organic farming, solidarity etc).

Crisoperla participates or organizes public initiatives regarding sustainability issues: for example, on 2 June, the Association has organized two conferences, one on organic farming with participation of representatives of the organic sector at national level and the other on solidarity economy.

The agricultural practice and dissemination activities are the main tools of LINSAs to support the transition towards sustainability.

3. Is the LINSa a novelty, a niche or a change in the regime?

In the multilevel prospective of innovation, Crisoperla assume the characteristic of a niche. The network has an adequate level of coordination but, since now, it still operate mainly at local scale and it is not strong enough to challenge a given regime.

The intent of Crisoperla, born precisely to move away from the mainstream, is to act to change the rules, especially regarding the recognition and promotion of organic farming: despite its currently configuration as a niche, the recent activities carried out by the association at national level on organic farming (Crisoperla a is member of a national union that is acting in the direction of establishing cooperation between the different representations of the “world of bio”), well represent the potential of the project.

4. Is the LINSa focused on incremental innovation, mobilising and applying existing knowledge in given contexts or it is a network that ‘breaks the rules’ of dominant socio-technical systems and builds up new economic spaces endowed with their own rules, actors, and artefacts?

Crisoperla is a network that ‘breaks the rules’ of dominant socio-technical systems and builds up new economic spaces endowed with their own rules, actors, and artefacts.

The first element of breaking with the dominant socio - technical system was the separation of the two technicians, initiators of the network, by the official AKS: although their activities as animators that has allowed to put in contact several farms in Lunigiana was possible with funding from Regional Government, they acted to facilitate the exchange between farmers and not as "agronomist" (still, they don't play in Crisoperla the role of technical advisers) believing deeply in the creation of knowledge through exchange among peers.

The other element is that Crisoperla, especially the farm component, believes that the world of organic production is not recognized in the same way than conventional farming and, therefore, they don't feel adequately represented by Farmers' Unions; for this reason Crisoperla has acted in the direction of establishing a national representation for organic farms (a new Union) that enables the world of organic farming to gain equal recognition respect of the world of conventional agriculture.

The recent activities of the President of the Association within the new national union show commitment in this direction and willingness to try to "change the regime".

The third element of breaking concerns the commercialization of products of the farms: thanks to the relationship with consumers many farms are economically satisfied of selling their products to GAS, others prefer to move towards other forms of direct sales (farmers' markets, etc.) but, generally, all of them recognize an improvement in comparison with the conventional marketing channels (wholesale markets etc.).

During 2011 some farms of Crisoperla and the two technicians founded the Cooperative Under the Same Sky: this structure is responsible for commercialization of the products of the members. The project of the cooperative was “in embryo” since the foundation of Crisoperla as, especially from producers (farmers and fishermen) point of view, was also fundamental the economic aspect in this collective action. So, the farms have created a “space” where they can produce and sell according to their possibilities and respecting the common principles inspiring Crisoperla: the Cooperative is based on the same principles (organic farming, solidarity, etc.) but guarantees an income to companies and technicians who are part of.

5. Are there any things revealed about the level of innovation that were unexpected?

6. Summary of findings

- The innovation developed by Crisoperla is a radical innovation because it is expression of a break with the dominant economic, political, technical-organisational and cultural patterns.
- The concept of sustainability within this LINSAs is associated to organic farming, responsible consumption and solidarity between consumers and producers.
- Crisoperla assumes the characteristic of a niche. The network has an adequate level of coordination but, since now, it still operates mainly at local scale.
- Crisoperla is a network that 'breaks the rules' of dominant socio-technical systems and builds up new economic spaces endowed with their own rules, actors, and artefacts. Elements of breaking are: distance from formal AKS, commitment in creating a new national representative for organic farms, creating their own spaces for commercialisation of farms productions.

SCALE SYNTHESIS REPORT

Method: Interviews, documents analysis, workshops

1. What type of “association” is the LINSAs?: Degree of formality; degree of complexity; diversity of actors involved: types and role in the network; approximate number of nodes; geographical coverage; diversity of activities performed

Crisoperla is a cultural non - profit Association that operates mainly in the Tuscan Province of Massa Carrara and, partly, in the Province of La Spezia, in adjacent Liguria Region. Its membership is composed by farmers, fishermen, consumers' groups, other consumers' associations, technicians from both the two Regions.

The actors of the network belong to different social groups: organic farmers (producers of vegetables, honey, wine, oil, beef), two fishing cooperatives, a cooperative for social farming, two agronomists (initiators of the network), consumers organized in GAS, a consumers' association (ACU).

Table of Crisoperla members

Type of member	Number
Organic farmers	15
Cooperatives (total)	3
- Fishing	2
- fish processing	1
- Social farming	1
GAS	6 (6 persons, 1 representative per organization)
Consumers' Associations	1 (ACU Tuscany)
Agronomists	2

The network arisen from its activity is nevertheless wider, including other actors non members of the association, and depending on the new relationships established.

The network itself is also part of other local networks (i.e. being part of the management committee of farmers' markets, of local eno-gastronomic initiatives, other associations, etc.)

The choice to give the network a formalization was taken in 2009, after a period of informal cooperation among the first actors involved: the experience of Crisoperla in

fact arose from a early form of collaboration among farmers aimed at purchasing collectively input for organic farming (mainly seeds and seedlings); in this phase the role of facilitation played by the two technicians was crucial.

With formalization, members specified the mission of the association, that is promoting organic farming, exchange of experiences among producers and consumers and, more generally, the local economy. The statutes of the Association enunciates:

“Crisoperla is a cultural non-profit organization born to promote organic farming and organic production, encouraging synergies between producers, consumers and technicians”.

Having identified the field of activity of Crisoperla, the need of some of its members for a form of collaboration more focused on marketing issues led to the initiative to create a new cooperative (“Under the Same Sky”). This cooperative includes farmers and fishermen. The latter were already organized in two cooperatives, operating in Marina di Massa: one owns 7 fishing boats, has made the choice to sell directly to consumers and to turn to sustainable fishing (also starting the process to be certified); the other is composed only by women who started an activity of fish processing with organic products.

The network has therefore evolved and currently there is a distinction between the marketing activities and the socio-cultural activities.

The functions performed by Crisoperla / Under the Same Sky can be summarized as follows:

Linking consumers and producer

The key actors in this function can be identified in the technicians, farmers and consumers’ groups.

The technicians, as initiators of the network, played a preliminary work of networking between farmers and consumers, which then has consolidated through the establishment of the association and sees the engagement of other actors.

The link created between producers and consumers is currently both commercial and organizational-cultural. Indeed, the two areas of activities are intertwined. The Cooperative manages the commercial relation between consumers and producers (GAS, participation in Farmers’ Markets), while the Association is more oriented towards the management of all the socio-cultural aspects. Association and Cooperative collaborate, for example, for the organization of public initiatives: consumers (mainly the representative of a gas) and technicians organize the dissemination activity, the producers (the president of Crisoperla mostly) organize the markets and the collateral cultural initiatives.

Participating and organizing farmers’ markets

Key actors of this function are producers and technicians, as Cooperative “Under the Same Sky”.

Currently, they participate in five farmers’ markets in the Provinces of La Spezia and Massa. One of the two technicians mainly takes care of defining how to participate in the markets, takes contact with local authorities, etc. Is then the President of Crisoperla Association, a farmer and member of the Cooperative too, who actually attends the banquet of the products of the cooperative.

As Association, Crisoperla is also part of the organizing committee of one of these markets (“Spazio Contadino”, Massa).

Interacting with public institutions and civic movements

Within the network, this type of activity is carried out mainly by: the President (farmer), the two technicians, GAS (the referents of the various groups) and the representative of ACU.

The level of interaction and the actors who intervene in talking with institutions and making arrangements are related to the type of activity that it is necessary to carry out. Crisoperla Association, through the figure of its President, has joined the steering committee of an organization for the representation of organic farmers nationwide. This engagement is linked to the desire to take part in and promote a process of redefinition of the institutional framework for organic farming, which in Italy appears weakened by the fragmentation of representation system. Moreover, this represents an opportunity to reinforce also the position of the Association in relation to the local policies of territorial development.

Technical assistance

This type of function, carried out by the two agronomists, was particularly important in the early stage of the network development, to coordinate activities among farmers.

Now they act mainly as brokers, as “conveyor of knowledge”: through contacts they have with other organizations, they “capture” opportunities that are then proposed to the association or to the cooperative. For example, recently, mainly thanks to the activity of one of the two technicians, the cooperative answered to a call of the Tuscany Regional Government about the establishment of agro-food chains.

So, now, more than on technical aspects, they are engaged primarily in co-ordination of the activities and occupy positions of leadership within the Cooperative Under the Same Sky (President and Vice – President).

Regarding the approximate number of nodes characterizing the network, as shown in the next section, the two technicians represent a very important node, as well as the president of Crisoperla, the cooperatives of fishermen and the representatives of the two GAS (Massa and Castelnuovo Magra).

2. How is LINSNA structured?: 1st level characterises a simple network; 2nd level characterises links between networks; 3rd level characterises networks of complex networks

Crisoperla network is a second-level organization, as it includes among its members individuals (farmers, technicians) and organizations (fishermen cooperative, GAS, consumers' association).

In general, organizations participate in the activities by way of their representatives. They act as brokers to their respective networks.

In this contest, several actors of the network play a very important role. The President of the fishermen cooperative belongs to other organizations located in the Province of Massa in which communicates the activities carried out by Crisoperla; fishermen play also an important role as contact between producers of Crisoperla and some GAS out of the Province of La Spezia and Massa (the cooperative sells the fish directly, not only in the harbor but also through contacts with several GAS inside and outside Tuscany). The representatives of GAS transfer information from the mailing list of Crisoperla to that of the respective groups to which they belong. There is also the inverse flow of communication: the "brokers" disseminate in the mailing list of Crisoperla information from their personal lists or organization to which they belong (initiatives in which to participate, opportunities, etc.)

Crisoperla is endowed with a basic communication infrastructure. It has a mailing list for members and for other persons or organization they decide to include (i.e. SOLINSA Italian Partners) and a Facebook page open to the outsiders. It has also a page in the 'Under the same sky' cooperative web site.

Crisoperla Facebook page has 63 contacts, the one of the Cooperative 494 members.

Apart from its mission, the value of Crisoperla is in its capacity of linking different social networks. It represents a platform for communication that can be activated when needed.

For example, when Crisoperla organizes events, information is disseminated through the wider network, using also the communication infrastructures of the other organizations.

Events allow the network to materialize in time and in space, and give the opportunity to all network to consolidate their relations with the others and to strengthen their identity.

Events such as “Tutta un’altra città”, a fair on sustainability and solidarity economy organized once a year by the homonymous association (TUAC, a second level association working in Massa), represents an opportunity to work together on common goals; specifically Crisoperla is involved to animate the communication activities (workshops, seminars) and to manage the catering space by using the farmers products.

On the contrary, when the object of exchange is more technical or specific, for example related to agricultural techniques or to participation in farmers’ markets, it may involve some farmers and technicians. Likewise, when consumers want to activate a new GAS they can find them in the network, and contact them directly or through their representatives.

Periodical meetings of the association have consolidated a core group that takes most of decisions and facilitates the participation of a larger number of people. Participation varies in function of activities, so that *clusters*, areas of the network in which actors are more closely link to each other than in the rest of the network, emerge. In Crisoperla network some clusters have developed: for organization of cultural events, for organization of markets, advocacy of organic farmers.

Table of network properties

Property	Explanation	
Transactional content	a. Expression of affect b. Influence attempt c. Exchange of information d. Exchange of goods and services	a. Friendly relationship between some farmers and technicians (coming from previous contacts); b. Crisoperla President assume a role of leader, as well as technicians; c. Among all the actors through different instruments (mailing list, meetings) and dependent on topics of interest (farming, policy); d. Organic farmers supplying GAS and farmers’ markets.
Nature of the links a. Intensity b. Reciprocity c. Clarity of expectations d. Multiplexity	a. The strength of the relation between individuals b. Degree of symmetry c. The degree to which every pair of individuals has clearly defined expectations about each other’s behavior in the relation. d. Degree to which pairs of individuals are linked by multiple relations	a. Dependent on the level of interaction: stronger relations between those who work together in the same field of activity (i.e. gas representatives and technicians), weaker where there’s not a direct collaboration. b. The reciprocity is perceived c. Peer to peer relation among farmers, common expectations;

		<p>expectations agreed between farmers and consumers (mutual support).</p> <p>d. All the actors of the network are linked by multiple relations.</p>
<p>Structural Characteristics</p> <p>a. Size</p> <p>b. Density</p> <p>c. Clustering</p> <p>d. Openness</p> <p>e. Stability</p> <p>f. Reachability</p> <p>g. Centrality</p> <p>h. Star</p> <p>i. Liaison</p> <p>j. Bridge</p> <p>k. Gatekeeper</p> <p>l. Isolate</p>	<p>a. Number of individuals participating in the network;</p> <p>b. numbers of actual links in the network as a ratio of the possible external link;</p> <p>c. number of dense region in the network;</p> <p>d. number of external links of a social unit as a ratio of possible external links;</p> <p>e. the degree to which the network change over time</p> <p>f. average number of links between any two individuals in the network</p> <p>g. degree to which relations are guided by the formal hierarchy</p> <p>h. the individual with the highest numbers of nominations</p> <p>i. an individual who is not a member of a cluster but links two or more clusters</p> <p>j. an individual who is a member of multiple clusters in the network (linking point)</p> <p>k. a star who links the social unit with external domains</p> <p>i. an individual who has uncoupled in the network</p>	<p>a. See table at the previous point;</p> <p>b. not quantified</p> <p>c. three main clusters</p> <p>d. not assessable at the time</p> <p>e. It's a growing and expanding network, variable in the composition over time</p> <p>f. not valuable at the time</p> <p>g. There is a high level of participation in taking decision. High concentration of work on three actors.</p> <p>h. The President of Crisoperla,</p> <p>i. representative of a GAS</p> <p>j. there is more than one bridge: Crisoperla President, technicians, GAS representative.</p> <p>k. Crisoperla president, technicians, GAS representatives</p> <p>i. several individuals are uncoupled, farmers mainly.</p>

3. Summary of findings

- Crisoperla is an Association that operates at regional level.
- Crisoperla network is a second-level organization, as it includes among its members individuals (farmers, technicians) and organizations (fishermen cooperative, GAS, consumers' association).
- Formalization of the network has occurred after a period of informal integration. Progressively, the network has focused its mission on cultural activity, led by the Association, while from the same network a new organization, a cooperative, has been created.
- The main functions performed are: creating and reinforcing the links between consumers and producers, by promoting communication and cooperation in managing common initiatives; participating and organizing farmers' markets, seen

in their economic function but also as opportunity to reinforce the network and to communicate outside; interacting with public institutions and civic movements, to create and catch new opportunities to promote initiatives at local level, according to the sustainability goals shared within the network; providing technical assistance and brokerage activity; actively participating in defining a new institutional framework for organic farming at national level.

ORIGIN AND FUNCTION SYNTHESIS REPORT

Method: Interviews, small group meetings, document analysis

1. How did the LINSA evolve (diverse, emerging) and into what form? (D2.1, section 3)

The network originally built through *Crisoperla* Association initiative is so growing, changing size and shape, by diversifying internally and integrating with other networks. Through that, also its potential in terms of flow and creation of knowledge changes, giving rise to new opportunities.

The network, created by the interaction between organic farmers and technicians, has gradually evolved into an organized structure including consumer groups and CSO, so integrating cultural and political functions. The presence of actors coming from different networks, indeed, led to the growth of the association and to the sharing of new objectives.

The process of structuring of the organization highlights the internal differences of attitudes, expectations and goals still existing among members and the consequent effort to identify common points. This finds its main expression in the work of negotiation needed to define internal regulations which has involved the association for some months. Sometimes, farmers do not recognize themselves in consumers' narrative and, vice versa, consumers find farmers' vision too reductive.

This internal difficulty is of course part of a broader process of identity building, which it is not to be taken for granted within hybrid organizations, where the presence of different perspectives and expectations can hamper the definition of shared visions and goals and, then, the construction of common projects.

There is awareness of the need to face this difficulty among the members of the Association. A first contribution in that direction is coming from within, through the 'brokerage function' of a member, Genevieve (representative of the GAS of Castelnuovo Magra), whose skills (in sociological field) can help to clarify some aspects. But the other important support comes from a more structured process of learning that the Association itself has voluntarily undertaken by self-organizing training activities (with the participation of experts from outside) or participating in seminars addressed to specific issues (as techniques of communication; network building among organizations, with particular reference to the world of solidarity economy, etc.). Also the relationship established with the University (in the context of SOLINSA project) has been seen as an opportunity, because of the particular moment the Association is going through and the related needs (to clarify its mission, to define internal regulations, to set up suitable tools to operate effectively, etc.)

The increasing cultural and political engagement of the Association and, on the other side, the growth of engagement on commercial activities by the farmers' Cooperative have progressively made necessary a clear distinction of roles and a separation in managing the two fields of activity.

A first important question is so that of the identification of the demarcation between the activity of *Crisoperla* Association and that of the Cooperative. There is a consensus on recognizing that the Cooperative was born from the experience of the Association, and

that, as such, it must share its values and principles (especially with regard to solidarity between consumers and producers). At the same time, the fact that there is no exact coincidence between the members of the two organizations (as we said, not all members of the cooperative are members of the association and vice versa) is a weakness, that raises some ambiguity in terms of identity and related practical choices. This growth of the network, allowing the encounter among different worlds and related knowledge and practices, involves important 'boundary processes', that is possibilities to create new knowledge through learning processes based on interaction between different entities (Roberts, 2006). Within them, as we said above, the role of some actors, through their specific skills and position (due to their multi-membership, as nodes of other networks), appears essential to promote and to widen spaces of learning. From this intensified interaction new opportunities arise (new relationships, new initiatives, new fields of action) to develop and spread innovative approaches and practices (e.g. on organic farming, on culture of land and food).

2. What are the policy principles, policy instruments and financial arrangements? Do these affect the success of the LINSAs? (D2.1, section 4.6)

As an association, mainly members of Crisoperla performe activities on a voluntary basis; the flow of money coming in is mainly derived from membership dues and external contributions deriving from the organization of dissemination activities and public events.

They have received funds by the municipal administration of Carrara to organize training courses and seminars.

The situation is different for the Cooperative. It fits into channels of public funding available for this kind of activities (for example, coming from the Regional Government of Tuscany).

3. Summary of findings

- The network, created by the interaction between organic farmers and technicians, has gradually evolved into an organized structure including consumer groups and CSO integrating cultural and political functions.
- The increasing cultural and political engagement of the Association and, on the other side, the growth of engagement on commercial activities by the farmers' Cooperative have progressively made necessary a clear distinction of roles and a separation in managing the two fields of activity.
- The growth of the network, allowing the encounter among different worlds and related knowledge and practices, involves important boundary processes, that is possibilities to create new knowledge through learning processes based on interaction between different entities. The role of some actors, through their specific skills and position (due to their multi-membership, as nodes of other networks), appears essential to promote and to widen spaces of learning.
- For the Association, the flow of money coming in is mainly derived from membership dues and external contributions deriving from the organization of dissemination activities and public events. They have received funds by the municipal administration to organize training courses and seminars. The Cooperative instead fits into channels of public funding available for this kind of activities (for example, coming from the Regional Government of Tuscany).

TEMPORALITY SYNTHESIS REPORT

1. The story of LINSAs: a collection of events that describe the weaving of the LINSAs and evolution of conflicts and alignments.

- 2006. Two technicians, Franco Giangrandi and Angela Patrizia Ulivi, start their collaboration giving technical assistance to organic farms, within a project funded by Regional Government of Tuscany.
- 2007. They follow a course on communication and project planning funded by the Regional Government. Up to that moment they have a one to one relationship with farmers. During the course they appraise the potentialities of group management.
- 2007. After the course they start to network with organic farmers and honey producers. Together with them they apply to other projects funded by the Province of Massa.
- 2008. The group consolidates to a number of about ten. They start periodical meetings, and the first outcome is the organization of collective purchase of organic inputs.
- 2009. Angela and Franco get in contact with GAS of Massa. They liaise between GAS and farmers. Together with other associations, they help organic farmers to organize farmers' markets in the province.
- 2009. some GAS members and the group of farmers decide to create an association, Crisoperla.
- 2010. The association soon includes 15 farms, two fishing cooperatives, 4 GAS, the two technicians, Angela and Franco.
- 2010 Crisoperla is involved in the organization of fairs and farmers' markets in the province.
- 2010. A GAS of Castelnuovo Magra, a town of Liguria, joins Crisoperla, together with other farms of the province. The key person of this enlargement is Geneviève Marotel, a sociologist, member of GAS of Castelnuovo Magra
- 2010. Other GAS, ACU (a local consumers' association) and other farms join the cooperative. The Association is contacted frequently to take part in public initiatives organized by NGOs and by local institutions.
- The process of structuring of the organization demands to overcome the internal differences of attitudes, expectations and goals and to define a common mission and related strategy (and consequently: internal regulations, external communication).
- The growth of Crisoperla raises the problem of the relation between voluntary work and paid work. Actually Angela and Franco provide a lot of unpaid brokering and technical assistance work, while farmers get a benefit from participating in the association as they broaden their customer base and have an economic return from the participation.
- To separate the cultural activity from the commercial activity Crisoperla decides to create a cooperative, with the purpose of selling the products and giving technical assistance to farms.
- 2011. The cooperative "Sotto lo stesso cielo" (Under the same sky) is founded. Franco is president and Angela the vice-president.
- At the moment, one of the most relevant points of concern is drawing a distinction between the activity of Crisoperla and that of the Cooperative. The increasing cultural and political engagement of the Association and, on the other side, the growth of engagement on commercial activities by the farmers'

Cooperatives have progressively made necessary a clear identification of the respective roles and a separation in managing the two fields of activity.

GOVERNANCE SYNTHESIS REPORT

Method: workshop, interviews, documents analysis

1. How is the LINSAs governed/managed?

- To what extent is the network governance inclusive/democratic?

In addition to Crisoperla Association the network of Crisoperla comprises other structured organizations (cooperatives). The governance of the network tries to be fully democratic: regardless of governing bodies by statute, the members want to take decisions collectively, in a form as much as possible shared with all the members of the Association. To this end, instead of taking decisions through meetings of the bodies, they prefer to organize monthly meetings and address the various issues collectively. To carry out this principle of "democratic" governance, in fact, since its founding in 2009, the Governing Council of the Association has never met formally.

Crisoperla has the features of a "participant-governed network" (Provan and Kenis, 2007), managed directly by its members without external agents. As such, the network is characterized by a high level of sharing and is highly decentralized as "involving most or all network members interacting on a relatively equal basis in the process of governance" (shared participant governance). This form of governance in Crisoperla is carried out in a fairly structured way: actually, monthly meetings are an instrument of government.

On one hand this model of governance is very inclusive, on the other it shows some deficiencies in terms of efficiency and effectiveness, especially from the point of view of decision-making. This aspect will be discussed in detail in subsequent sections.

- To what extent is the LINSAs institutionalised?

The network has a formal structure, which is that of a 'Social Promotion Association' (a model of non-profit association aimed at pursuing social and cultural goals). The association has statutes and governing bodies. Recently, it also has a set up internal regulations.

Are part of the association farms (organic), cooperative (producers, fishermen and cooperatives engaged in social services), an association of consumers (ACU) and some consumer groups (organized according to the model of GAS (Solidarity Purchasing Groups)). The different components of the network are members of "individual" networks more or less institutionalized (farmers' unions, associations and certification bodies for organic farming), but as Crisoperla Association they wanted to position themselves as an autonomous entity in relation to the other organizations of agriculture and third sector.

- How are communication, decision making, problem solving actioned?

As said above, Crisoperla is a participant governed network, hence it is the collectivity of partners themselves that makes all the decisions and manages network activities and any matter concerning the association is shared by activating the different forms of communication that the association has adopted, such as mailing lists and monthly meetings. The mailing list is a tool that is not only used to exchange information useful on the operational level, but also to propose topics to be discussed and on which it is necessary to take decisions (e.g. participation in a fair or a conference, organization of special events, cultural issues, official positions to be taken with respect to local matters

etc.); within the mailing list are presented issues on which the members start to exchange opinions, in preparation for a face-to-face. The common position is that decisions are taken at the monthly meetings by those who participate. The monthly meetings are the spaces in which decision-making processes are finalized.

One of the critical points of this model of governance is however represented by the members' participation in the monthly meetings, which strongly influences its effectiveness. Despite the importance attributed to these meetings, they do not see the participation of all members: some of them are always present, others never participate, others participate only if highly stressed (e.g. through numerous calls). The result is the unintended presence of "power groups" (see point 2), consisting of those who participate regularly in the meetings and that, in the end, make decisions for the whole group. This lack of participation in decision-making occasions reduces the democratic potential of the interaction among the Association members.

Network members take decisions about the various activities they carry out. The evolution of the network has led to a widening of the functions and the resulting need to enable specific decision-making. Both in the case of internal management, and in the case of institutional activities, the members seek a general consensus and agreement; this sometimes can make the decision processes more difficult.

• **Do actors have sufficient skills/competencies for network governance?**

Crisoperla actors seem to have low skills about governance of a network. Those who play as representatives are highly motivated, a strong desire to achieve results, but are often deficient in ability to manage processes effectively and efficiently. The participant-governed model of governance requires to have specific skills that currently only a few actors in the network have.

However, there is awareness of these deficiencies. It is significant to that regard the decision to initiate a process of learning to acquire greater knowledge about the decision-making through consensus method.

2. Who has authority/control?

• **What are the power relations: inside LINSAs and inside/outside LINSAs.**

As Crisoperla has adopted a shared network governance pattern, it is potentially the collectivity of partners that makes all the decisions and manages network activities. Power in the network, at least regarding network-level decisions, is more or less symmetrical, even though there may be differences in organizational size, resource capabilities, and performance. There is any distinct, formal administrative entity, although some administrative and coordination activities are performed by a subset of the full network. In theory, the network acts collectively and no single entity represents the network as a whole.

As for power within the LINSAs, in the case of Crisoperla we cannot speak of power relations but rather of greater interaction between some actors who, more than others, organize activities, attend meetings and collaborate. This inevitably creates the conditions for the presence of a 'dominant' group, which however does not recognize this role for itself and wants to respect the principles of members' participation and of sharing of any decision within the Association.

With regard to the representation of the network to the outside, some actors act as spokesmen more than others and some are "identified" with Crisoperla more than others, depending on the individual relationships that they have activated or on the activities in which they participate.

• **Who is excluded from the LINSAs and why is he/she/they/it excluded?**

The level of participation and sharing in the activities of the network has changed over the years, especially by some actors. In the current phase of network development some members are coping with the so-called "burn. out effect", as often happens in this

type of network, after the enthusiasm that characterizes the early stages of development and the arising of difficulties to meet the commitments in terms of time and energy.

This phenomenon has been noted by Weiner and Alexander (1998). A likely outcome of this problem is that a small subset of participants may end up doing most of the work, producing a drop in enthusiasm, increased levels of frustration, and a gradual shift toward greater centralization of governance.

At the current state of network development, farmers are generally less included in the activities of the network, except for a few cases. Consumers and technicians are more active and involved. The reason why some farmers have cut themselves off (in reality, no one has excluded no one) is that, they say, they do not have the time or ability to perform certain tasks (preparation of documents, cultural activities); others say that they do not recognize themselves in the most goals and objectives of Crisoperla (they expected a higher commercial return rather than a political-cultural evolution of the mission). It should be noted in this case another critical feature of the network: not all members are able to distinguish between their individual goals and those of the network they have joined. This, in the absence of a clear communication on this regard, may eventually lead to alienate some members, worsening the already precarious participation in governance or paving the way for the loss of trust and the development of internal conflicts.

· **What are the different levels of governance?**

As defined in the Statutes of Association, the governing bodies of Crisoperla are the following: the President, the Executive Council, the Assembly of members of the Association.

These different levels of governance are formal, since for choice of partners the decisions should be taken collectively. In addition, the president and the vice-president carry out functions of representation, if requested, and of secretariat (e.g. convening monthly meetings, convening members' meetings, drafting of minutes). The Executive Council has never met because the members preferred to continue with monthly meetings and decide collectively on all matters relating to the activities of the network.

The main decision-making processes have thus far regarded: the internal management of the association (in this respect, the writing of the Regulation has been a long period for discussion and decision regarding a variety of aspects related to the mission and operational aspects of the association);, the organization of cultural activities (e.g. special events); the management of requests received by members from their personal networks (mode of sharing, etc.); the organization of learning paths (see box for details); the relations of the Association with the outside, in the area (e.g. relations with local authorities) and in broader contexts (e.g. relations with the national network of operators of organic farming).

The members' Assembly is convened annually and decide whether to approve the budget and any other business.

3. How does the governance approach affect network efficiency and /or effectiveness of the LINSAs?

Following the approach of Provan and Kenis (2007), we analyze the four key factors - trust, size (number of participants), goal consensus, and the nature of the task (specifically, the need for network-level competencies) - which are at the basis of the evaluation of the success / failure in the adoption of a particular form of governance, in this case the shared approach. For a successful form of governance, the four factors should be characterized as follows:

Governance Form	Trust	Number of participants	Goal consensus	Need for Network-Level Competencies
Shared governance	High	Few	High	Low

The analysis of the factors of Crisoperla:

Governance Form	Trust	Number of participants	Goal consensus	Need for Network-Level Competencies
SG in Crisoperla	Intense enough, there is the perception of trust between members	20, between organizations and individual members. The small number makes the form of shared governance for the moment adequate	Under renegotiation, but the consensus on the goals has always been high.	Although the success of this form of governance does not require a high level of competence for the functions it performs, the Linsa need more skills in terms of management and organization

The form of governance activated by Crisoperla appears partially suitable to the structure and needs of the network and affects its effectiveness, especially in decision-making. For this reason, it probably will be re-negotiated in the future. The energy and the will to achieve the objectives are common to most of the members, and, at the moment the network is small (considering the number of components). Nevertheless, shared governance begins to present some critical aspects that should make the Association reflect on alternative forms of management, more formally centralized at least for the decisions of an operational nature.

4. Summary of findings

- Crisoperla is a formal network (Association of Social Promotion), whose members are both economic entities (individual and collective enterprises) and social entities (non-profit organizations).
- Crisoperla is a "participant-governed network" (Provan and Kenis, 2007), run by its members without external entities, characterized by a high level of sharing and highly decentralized (shared governance participant).
- On one hand this model of governance is very inclusive, on the other it is exposed to the risks that may result from a lack of participation of members to collective decision-making moments, in terms of loss of efficiency and

effectiveness, and decrease of the democratic character of the decision-making itself.

- A not generalized and constant participation in governance can also lead to difficulties in distinguishing individual and network-level goals, with possible loss of trust and development of conflicts.

LEVEL OF LEARNING

Method: small meetings, interviews, workshop

What is the LINSAs approach to learning:

- **To what extent, and in what way, is learning coordinated, managed and/or formalised?**

In Crisoperla, forms of formalized and non-formalized learning coexist.

For what the first form is concerned, some members decided to organize some study circles to improve the management of the association; one of the courses was on the group management and consensus method. The association has decided to participate in a call of the Municipality of Carrara, which provided funding for some study circles with training objectives for organized groups (associations, etc.); some members of the network activated themselves and answered the call. Of the two courses for which the request was made (group management and method of consensus and agricultural legislation), was made the one related to the group management. In this case, the learning process has been thought, organized and managed by a specific group of people (11, between farmers, members of the GAS, technical and consumer associations).

There are also forms of non-formal learning, those relating to communications and cultural exchanges which occur between network members and between them and others outside the network (peer exchange) (BOX 5 and 6).

In fact, the development of the learning process has followed the various stages of formation and growth of the network. In its early stages of development, organic farmers have started to exchange information about organic farming techniques organizing visits on farm, and have confronted on how to find the necessary technical inputs (fertilizers and so on).

The entry in Crisoperla of a fishing cooperative was another important learning opportunities, offering a chance to meet a more 'managerial' management way of business and an efficient model of cooperation. The contacts between the fishermen and GAS have also provided an opportunity to gain awareness of the issues of sustainability, from which the choice of the Cooperative to convert to sustainable fishing. The relationship with the fishermen/women has contributed to foster the structuring of the network; by the example of Cooperatives and also thanks to their support, in 2011 was formed the Cooperative Under the Same Sky, that it is the business unit for some of the organic farms that are part of Crisoperla.

- **What are the tensions between formalised explicit (codified) approaches to learning and non formalised implicit learning approaches?**

Within Crisoperla, the different learning processes are primarily of implicit and not formalized nature. Apart from the two study groups (see above), form of formal learning and involving some members of the network, the forms of non-formal and implicit learning concern instead all members. For example, in the definition of the aims of the

association and rules of internal conduct (such as during the preparation of the Regulations), has set itself the need to codify the various aspects, using a common language to represent the different entities of the association. This step was not immediate and required commitment in terms of willingness and openness: the richness of Crisoperla sometimes generates conflicts due to different views and priorities of the groups (farmers, consumers and technicians).

Still not formalized is the definition of spaces of communication with the outside world: in this sense the role of some actors, through their specific skills and position (with regard to their multi-membership, as nodes of other networks), appears essential to promote and to widen spaces of learning. From this intensified interaction new opportunities arise (new relationships, new initiatives, new fields of action) to develop and spread innovative approaches and practices (e.g. on organic farming, on culture of land and food).

These roles have been created spontaneously without having behind a precise collective definition.

- **What are the structures and mechanisms of learning? (is an AKS structure evident? What are the: communication patterns, communication infrastructures, retrieval information systems, intellectual property rules, validation of information protocols?)**

In the LINSAs there is no AKS structure supporting the activities of learning / training of group (a part from Pisa University and the SOLINSA research team).

The structures and mechanisms of learning can be described as follows.

Communication patterns

The communication flow among the members of Crisoperla is characterized by a different intensity, degree of sharing among all the members in relation to the different areas of discussion. If, for example, the exchange of information is related to a specific technical problem on agriculture, a farmer asks another farmer for help, without addressing to the group of consumers; sometimes the issue is shared with the two technicians. So, this kind of exchange of knowledge does not involve all the actors of the network. Mostly the exchange of knowledge on technical issues is made orally, through discussions or comparisons even in non-dedicated places (at markets, public events, etc.).

With regard to political-cultural-dissemination topics, the passage of information and knowledge takes place among all the actors of the network, even if the level of participation in the exchange and sharing can vary. Not everyone is in fact involved in discussions about these topics which, in contrast to the previous point, occur mainly among the groups of non-farmers (some farmers participate, but are always the same).

The information flow to and from the outside takes place mainly during the participation of the LINSAs in public initiatives and farmers' markets and also through the work of the dissemination that some members of the association held in schools. These occasions are the main moments of exchange with a "public" who is not necessarily included in the circuit of organic farming or in civil society organizations active around issues of sustainability.

Communication infrastructures

We can identify several communication infrastructures used by the network in a continuative way: mailing list, monthly meetings, farmers' markets, relationships with GAS, social networks. There are, moreover, other infrastructures, indirectly addressed to foster communication.

As said above, the mailing list is the main tool used to disseminate, exchange and share information and knowledge within the network. This tool allows to exchange/require opinions, to discuss organizational issues, to share decisions (for both of the models described above) and spreads information resulting from the action of brokerage that some actors play for the association.

Farmers' markets are one of the most important communication infrastructure to communicate with occasional consumers. They can be considered an 'entry point' into the Crisoperla network, as consumers can get into contact with farmers just 'passing by'. Markets represent also an occasion for producers to share information with each other about products and marketing, to learn from one another and to build relationships.

The relationship with the GAS represents a significant occasion to communicate for producers and consumers. The distributions of the products and the participation to the GAS monthly meetings are the practical occasions to do that.

Information access and retrieval

Access to information depends mainly on a few people in the network who are more active in that regard and facilitated by their professional background or engagement in other networks. As the network grows, a process of specialization is developing and there is a process of identification of competences. The mailing list and the Facebook page provide tools to access generic information.

Intellectual property rules

There is a strong attitude to share information among the members of the LINSAs. The approach to knowledge creation and sharing is strongly grounded on interaction and exchange among peers. This refers both to the interactions about technical issues, e.g. among farmers, and to the more political fields of activity, where ideas and projects always appear the outcome of a common effort (even if they are proposed by some initiator).

Validation of information

As for the validation of information accessed by the network there aren't, to date, specific codes in this regard. Information is available for all and the validation is, somehow, collective.

Among farmers in particular, there is an exchange among peers related to the techniques used, new technologies in organic farming, etc. and, spontaneously, some reference roles with regard to cultivation techniques and crop protection have been created.

Can individual, social and organisational learning be identified?

• If so can they be separately characterised?

The flow of information circulating within the network is rather intense, particularly in the early stages of network development; in these moments, individual learning was greatly stimulated by the interaction with other stakeholders (farmers with other farmers, with consumers and fishermen).

The progressive structuring of the network has led to a shift from individual to collective dimension of learning. The formalization of Crisoperla has, in turn, implied a greater level of coordination and sharing of resources between the members of the network; for example, they have learned to co-ordinate themselves to organize collective initiatives (See BOX Organization of events)

Individual, social and organizational learning within Crisoperla are therefore distinguishable but hardly characterizable separately and appear more like different levels of depth of the same process.

What are the emerging needs for knowledge and skills in the LINSAs?

• How well equipped/competent are the actors and institutions to meet these needs?

Within the network emerge need to acquire expertise on group management and organization: the study circle was an opportunity to that effect but it was only attended by a small group of members while it believes that is necessary, or at least important, that all members have experience in this regard.

Other requirements from the point of view of competence are related to the figure of “animator of territory”: the network between the various subjects that animate Crisoperla (organic producers, consumers, associations, cooperatives) can grow and maintain itself only through a continuous interaction and dialogue between the different entities. Thus, some members of the network consider essential the training of specific figure in this regard.

Another important aspect is represented by the communication skills with the outside world: the initiatives carried out in the territory of the association shows ability to communicate; major shortcomings, instead, emerge in the interactions within more complex networks (eg national network of organic farming), where it is necessary to know different ways.

- **To what extent is education, training and professionalization needed and provided?**

The different actors in the network have identified areas of support diversified.

Especially farmers believe they have the technical skills to carry out their activities, so that none of them is followed by a professional agronomist from a technical point of view.

The training needs that are specified are relative to normative updates (should organize another study circle on agricultural legislation, in particular on the procedure for access to land). In relation to their belonging to network, as has been said, it has developed the need to acquire knowledge regarding the method of "management" of groups and skills related to the function of “territorial animator”.

Recently, was asked by one of two technicians belonging to Crisoperla, president of Under the Same Sky Cooperative, a support to SOLINSA research team regarding the issue of price formation in the market of organic products; his idea was to organize in farmers' market located in Massa some moments of analysis with farmers about the price of organic products (principles, modes of price formation, etc.) and for this reason our research group was called for a technical and scientific support.

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- **How much priority does the LINSAs assign to learning and identifying current and future learning needs?**

The learning needs in LINSAs are different and depending on the subgroups of action that spontaneously formed. For some it is essential to acquire additional knowledge and learn more about how to work within a network, both organizationally than interactively. The “circle of study” on group management and method of consent has stimulated those who took part to go deeper into the theme recognizing the extreme usefulness. Other

members of the network instead (especially farmers) do not recognize in these issues a real need, preferring to deal with the more practical and less "reflective" aspects: they are interested in the exchange with other farmers about production techniques, development of new sales channels and enhancement of existing, all to activate in the logic of the "exchange among peers" (in this regard, the experience of visiting the group of "Paniers Marseilles "has been very helpful to bringing out these needs)

4. Summary of findings

- The development of the learning process has followed the various stages of development and growth of the network, responding to the needs and learning opportunities that presented themselves from time to time.
- Within Crisoperla, the different learning processes are mainly of implicit nature, strongly based on peer to peer exchanges and only in some cases have become formalized.
- Within the network, the role of some actors, through their specific skills and position (with regard to their multi-membership, as nodes of other networks), appears essential to promote and to widen spaces of learning.
- In the LINSAs there is no AKS structure supporting the activities of learning / training of group.
- The communication flow among the members of Crisoperla is characterized by a different intensity, degree of sharing among all the members in relation to the different areas of interest and discussion.
- Individual, social and organizational learning in Crisoperla are distinguishable but hardly characterizable separately and appear more as a continuum of different levels of the same process.

LINKS TO THE AKIS SYNTHESIS REPORT

Method: interviews, workshops, participation to LINSAs initiatives

Linsa connections with the formal AKIS system

- **What are the LINSAs connections with the formal AKIS system? Formal or informal connections at individual or institutional level? Do they use AKS research? Advisory services? Education and training?**
- **What are the opportunities for connection to the AKIS? Do they engage in any joint activities/ partnerships with AKIS? Are there boundary organizations? Brokers? Spanners?**
- **What are the barriers for connection to the AKIS? Lack of familiarity? Irrelevant knowledge? Access issues? Different language? Different value system? Absence of common means of validating knowledge claims?**

Linsa Crisoperla was born and developed with the intention of placing itself in a position of autonomy compared to some of the main actors of the official AKIS, as Farmers' Unions and advisory services. The two agronomists, founders of the association, had already made the choice to get away from the official system of advisory services, which they considered not suitable to support organic farms and, more generally, the development of organic farming. According to them, it was not addressed specifically to enhance the quality of organic products and the role and the ability of organic farms to contribute to a different development of the territory. At the basis of these deficiencies

they put a different vision of organic farming and of its opportunities. They so set up a model of technical assistance geared more closely to the defense of the specificity of this method of production, taking sometimes distance from the official system. Doing that they also recognized the value of the farmers' knowledge and the importance of the exchanges among farmers. For this reason, they reorganized technical assistance to production relying on the interactions between farms in the same area (box 1). In the same way, by encouraging forms of cooperation, they supported farms in solving marketing problems, central to their survival (in a market that makes difficult the provision of inputs for organic farming and does not reward adequately organic products). This was another issue completely neglected by the conventional system of technical assistance.

At the moment, no farms of the Association makes use of advisory services: the agronomic management of the farms is based on the individual experience and on the exchange of knowledge with other farmers belonging to the network. Farmers are turning to Farmers' Unions not to receive technical assistance but for administrative and bureaucratic issues such as, for example, keeping the accounts, management of pension contributions etc.

The network that has developed from this intense interaction between farmers (and not only) more recently is working to establish new relationships with some organizations related to the AKIS on the territory, in order to cooperate in the organization of local fairs and events, as well as with some local associations for organic farming, with the aim of encouraging the renewal of these organizations.

The action on the territory have opened up further opportunities. For example the LINSAs have developed connections with some structures of the school system: in two high schools in Liguria, Crisoperla realized some courses for students about organic food and farming. Within this framework it is crucial the role of some members of the network who have represented the point of contact between Crisoperla and the structures they work with, so acting as brokers.

Regarding the relations with research of the AKIS and, specifically, with the university system, the participation in the SOLINSA project represented an important opportunity, come at the right time. The members of Crisoperla have asked several times the SOLINSA team studies, researches on specific technical aspects (e.g. methodologies for calculating prices of organic products and wildlife management) (box 4), as well as participation in dissemination events organized in the area.

The relationship of Crisoperla with the AKIS so appears not linear: on the one hand, the actors tend to specify their detachment from traditional technical assistance, education and research system and reaffirm their willingness to place themselves as an autonomous subject; on the other, in some way they seek to establish collaborations. These are, however, still special occasions. In fact, it seems there is no willingness by the Linsa to collaborate on a permanent basis or join the AKIS, basically because they feel they have a value system that differs from that of Farmers' Unions and technical assistance services, and they are addressed to a system of training of knowledge that goes beyond the formal system and finds new and more significant stimuli from the interactions within the network of reference.

Significance/Relevance of AKIS

- **How effectively does the conventional AKIS meet the needs of the LINSAs? Do they provide relevant information? Does it meet emerging needs for knowledge and skills in the LINSAs?**
- **Does the Linsa want to connect to the AKIS? Or are they already getting sufficient support/knowledge from elsewhere?**

- **How important/relevant is the AKIS to the LINSAs? Are there other knowledge systems which are more relevant eg health care, energy, food justice?**
- **How does the LINSAs value or judge the AKIS? What is important to the Linsas when they look for information (scientific credibility, inspiration, validation of their own knowledge and beliefs)?**
- **What are the views of the AKIS representatives? Does the AKIS need LINSAs? How do they value LINSAs?**

The current AKS does not meet most of the needs of Linsas in terms of knowledge, support and training. The same basic objectives are not shared. The system of values of Crisoperla is often opposed to those that are the foundations of conventional AKS (productivity, technological innovation, performance evaluation in economic terms), since it is based on a completely different conception of agriculture and lifestyle. At the center of the interests of Crisoperla there are: the expansion and promotion of small-scale organic farming, the agricultural valorisation of marginal areas, the adoption of sustainable production and consumption practices, the spread of an alternative culture of food, the preservation of the territory. To that end, the exchange of knowledge among peers, often not codified by the official scientific sources, plays a relevant role. The pursuit of these goals through consistent strategies and actions not always meet the agreement of the organizations of the conventional AKS.

Surely the Linsas need support, but until now the AKIS did not seem the most appropriate system. It is through the network of relationships created and in which it is embedded that the association is giving response to the additional needs of knowledge, support and stimulus. In particular, the networks of solidarity economy (box 5) is proving to be a significant source to that regard. Through the mailing list of other organizations that are part of the network of solidarity economy, members of Crisoperla have access to information, news, update themselves on political and technical matters, seek confirmation and evidences to support their beliefs (validation of their knowledge). At the basis of this exchange there is the sharing of the same basic principles and objectives.

From their point of view, the AKS is largely not 'aligned' in this sense and it is not able to support the members of the association according to their needs. This aspect is crucial for the possibility of triggering processes of change of the same AKS. The few experiences of collaboration that are enabled (eg. with the University), owe their success to the ability to establish a dialogue (the importance of language, methodologies, credibility) and an active cooperation with the LINSAs on issues considered important by it (e.g. sustainability), providing support and validation to their ideas and actions.

Summary of findings

- Linsas Crisoperla was born and developed with the intention of placing itself in a position of autonomy compared to some of the main actors of the official AKIS, as Farmers' Unions and advisory services.
- The network that has developed from this intense interaction between farmers (and not only) more recently is working to establish new relationships with some organizations related to the AKIS on the territory in order to cooperate in the organization of initiatives at local level
- it however seems to not be a willingness of the Linsas to collaborate on a permanent basis or join the AKIS, because of the differences they feel in the value system with Farmers' Unions and technical assistance services, and for the different approach to the system of training of knowledge, which in their opinion has to go beyond the formal system (eg. university) and to find new and more significant stimuli from the interactions within the network of reference.

- The current AKS do not meet most of the needs of Linsa in terms of knowledge, support and training.
- Surely the Linsa needs support, but until now the AKIS did not seem the most appropriate system. It is through the network of relationships created and in which it is embedded that the association is giving response to the additional needs of knowledge, support and stimulus.
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EFFECTIVENESS AND COST EFFICIENCY TEMPLATE

What type of support does the Linsa use/look for?

External/ direct support/'hard' support measures - policy instruments and funding support, financial instruments etc. Who provides support? What is provided?

Internal/indirect/'soft' support - support they have received from each other, mentors, volunteers, facilitation, enhancing communication and linkage etc

The "external" support tools used by Crisoperla are European funds channeled by the Regional Administration. In the early stages of its formation, the first members of the network took part in a Project funded by the Tuscany Region, addressed to support the development of organic farming in parks and protected areas. One of the two agronomists of Crisoperla worked as part of this project, while the other lent technical assistance to farms in another regional program (there was a law in Tuscany providing technical assistance to farms). More recently, the cooperative *Under the Same Sky*, that is a member of Crisoperla, has adhered to a call of the Rural Development Plan of Tuscany to create a distribution platform for organic farms at regional level.

Crisoperla, however, utilizes mainly forms of "internal" support, not financial. The functioning of the network is based on the voluntary work carried out by some members of Crisoperla: actually, voluntary work supports many of the activities carried out by the association, such as the organization of events, information and updates on issues considered important, external relationships (with other associations, public authorities) and internal relationships (motivate members, etc.). Some members do more volunteer work than others, and this often influences the functioning of the organization which, without the availability of these people, could not continue to operate.

The function of "animating" the territory carried out by the two agronomists in the initial phase of the network still continues to be important: crucial is the role of Patrizia Ulivi and Geneviève Marotel in moderating the relations within the network, between producers and consumers, in recovering those relations that over time tend to be loosen, in conveying the network members to monthly meetings or initiatives organized. With their "work" they facilitate the flows of communication between the different components of the network, so giving an important contribution to the operativity of the Linsa. At the same time, they play a key role as brokers. In particular, Genevieve, for the specific skills she possesses (she is a sociologist), is giving an important contribution in fostering the internal growth of the network and in strengthening the capacity of the Association to spread an alternative culture (on food, environmental resources, agriculture) on its territory. Moreover, as she is French, is favoring the encounter with other important realities in France moved by the same ideals and purposes (the AMAP Marseilles).

The relationships established within other networks, both locally and extra-locally, often thanks to the ties of the individual members, are an important source of knowledge and stimuli for the Association. It's the case of the local network ReAltra, of the Tuscan Coordination of Organic Producers, of the national association for organic farming

UpBio as well as of the national network of Solidarity Economy. These networks provide the most fruitful stimuli.

In addition to that, there is the relationship established with the team of the University of Pisa through the SOLINSA project, which is perceived by the association as an opportunity for internal thinking and support during its process of reorganization.

Effectiveness (impact) for all kinds of support discussed in the first question.

- **To what extent do the different types of support help the LINSa to achieve its goals? (or achieve innovation and learning?)**

Both the external support (regional funds) and the internal one (volunteer work, facilitation/brokerage) are not enough to ensure that the Linsa can achieve its goals and growth in terms of innovation and learning. Public support has been crucial in the start-up phase of the experience of Crisoperla, whilst more recently some members of the association have turned to forms of public support only to ask for funding for a collective project (for the marketing of organic products at regional level), of which at the moment the outcome is unknown. It should be recognized, however, that the current forms of public support (especially from rural development policies) do not have adequate support measures for Linsa as Crisoperla and their development.

With regard to the "internal" support, the strong voluntary involvement of the members, especially of some of them, it is definitely essential and is the basis of the growth of Linsa, with regard to the processes of learning at individual level and then to the development of internal cohesion and sharing of visions and goals. But also this is only partially adequate to the operational and networking needs of Crisoperla. The voluntary work of a few members is crucial to the success or failure of the various activities and this makes precarious all the organization. Moreover, there is a lack of a system of coordination that may help to achieve the various objectives (cultural and marketing activities) in a more effective and efficient way.

More recently, the spurs coming from the wider networks in which the association has entered (organic farming, civic movements, solidarity economy) have proved to be particularly important for the further growth of the network in terms of capacity for thinking and mobilization on the territory. The knowledge gained and the relationships established in this contexts have enabled the association to self-organize structured moments of training (on topics self-defined and with the help of experts chosen by members), making use of public funding (provincial funds). Also the cooperation with the University, in the context of SOLINSA project, is proving to be fruitful in terms of support to Crisoperla growth and enhancement of its "political role".

- **What are the benefits of the different types of support- in terms of outcome and outputs and how have these been measured?**

The different types of support have brought benefits to the Linsa. We can consider as result: surely the construction of the network between local farmers and consumers and, consequently, the exchange of knowledge and the creation of synergies (with economic benefits too); the construction of relationships with other producers, between Crisoperla and other organizations operating in the world of organic farming (e.g. AIAB, UpBio) and of solidarity economy (ReAltra, ResSud); the consequent growth of representativeness of organic producers and, in general, of visibility and authority as a 'political entity' at regional level; a growth also of the capacity to interact with public actors. Also the organization of cultural and dissemination events throughout the region on various issues (e.g. fair trade, GMOs) is a result of the voluntary work done by some of the most active members and collaboration with other networks. In particular, the organization of informative seminars in the GMOs issue (box - 6), which has also gone out of the territory (in May one seminar was realized in Florence), demonstrates the acquisition of

a working methodology. At the same time it is evident the confidence gained in addressing these issues through contact with other actors and movements (e.g. Iris Bio Cooperative).

- **Who are the beneficiaries of different types of support? Individuals, a small group, a community, wider society?**

In the case of Crisoperla, the various types of support bring direct benefit to the main members of Linsa, namely organic farmers and consumers. We can distinguish:

- the collective benefits (for the group), as organizational skills, strategic capacity, Increased economic performance, greater visibility, political awareness development, capacity for interaction with local institutions;
- individual benefits, regarding both the economic and the personal sphere (growth of self-esteem, capacity for reflection, ability to engage in collective action, leadership function).

About indirect benefits, surely there was also an influence on the local community, within which Crisoperla works. Public initiatives realized are for the benefit of the community, which has another source of information and knowledge regarding the issues of organic farming and sustainability in general.

- **How long/how often has it taken to achieve any benefits from the different types of support? (Intensity of support)**

With regard to the external support, the benefits came after some years of technical assistance activities and animation in the territory by the two agronomists; the Regional Project (on technical assistance to organic farmers) began in 2006 and Crisoperla was founded in 2009. The benefits of internal support, especially those of voluntary work, as well as those from the relations in other networks, have been seen immediately and daily.

- **What would have happened without the different types of support?**

At the moment, it is not possible to evaluate the impacts of the absence of external support (institutional type), since the Linsa benefits from them only occasionally.

The absence of the other types of support (internal) would have resulted in a much slower and lower growth of the network: this regarding customer relationships and collaboration established among the producers with consumers, and therefore in terms of organizational capacity and economic performance; but also in terms of network growth, as entity able to effectively act on the territory, at cultural and political level.

- **Are the different types of support evaluated (externally or internally)? How? In terms of outcome and outputs? Have any indicators/criteria of effectiveness been used?**

The different types of support are not currently evaluated explicitly, by using indicators.

The members of Crisoperla, however, have other ways by which they acquire awareness of the effectiveness of the inputs used by their organization. For example, they are aware of the limitations of voluntary work, provided, inter alia, by a few members: the absence or reduction of commitment by one or more members (as it occurred recently, for various reasons) results in a reduction of the activity of the association. Moreover, it is evident the difficulty to involve all members in the various collective activities. They are also aware of the opportunity represented by the entry into external networks: the association would not have participated in projects outside of its territory and would not have had the chance to support the cause of biological nationwide. Moreover, it would not have the legitimacy that it has in dealing with certain issues within its territory or in receiving from local public administrators the task of organizing and managing important public events.

Cost efficiency

- **Is the level of support commensurate with the benefits derived? In your opinion or in the opinion of the LINSAs members?**

Currently, one of the most critical points (reason of possible instability of the experience) is the great commitment in terms of time and energy spent for the organization by a few members, albeit with a small division of tasks in different areas of intervention (e.g. cultural-political and marketing activities). The low participation of the other members sometimes leads to discouragement of the few committed and undoubtedly reduces the effectiveness and the benefits arising from their activities. The spurs that come from the external networks appear much more profitable, capable of triggering very significant processes of thinking and mobilization within the organization.

- **Is the support beneficial for some groups (LINSAs members only) but not for others (e.g. society)?**

At the moment, the Linsa appears to be strongly engaged in activities to raise awareness of local communities on issues considered important for the agriculture, food and land development (e.g. GMOs seeds, sustainability, alternative economic models, etc.). What it learns from the learning occasions that it self-organizes (the training courses) and through the spurs from the outside (especially from the other networks of relations in which it is inserted) supports the process of inner growth but it is also used to stimulate the local society and the public opinion in general (when, together with others, the Association participates in wider cultural initiatives).

- **Has there been any attempt to evaluate the cost efficiency of the support? How? What outcome?**

It is not possible to assess in quantitative terms in the strict sense. The success of the stimuli and support that the Linsa received and is still receiving is measurable (and it is evaluated by the association) in terms of success of the actions that it carry out through huge organizational efforts. The coordination of a growing number of farms, the attention that the Association receives from the local community (in terms of participation in the various events) and the recognition it enjoy within local government in the organization of public events are evidences of this success.

- **What are the costs to the LINSAs of seeking support - do they spend a lot of time/resources looking for support? Is this an effective use of their time?**

The need to interact with the outside world and receive stimuli for its work is part of the current phase of growth of the network, and it is not perceived as a big effort. Also the search for financial resources for this purpose (e.g. for the activities of self-training) is experienced as exploitation of opportunities that arise.

APPENDIX III



Agricultural Knowledge Systems In Transition :
Towards a more effective and efficient support of Learning
and Innovation Networks for Sustainable Agriculture

solinsa.net

CRISOPERLA TUSCANY, ITALY



01. THE LINSA

Crisoperla Association was founded in 2009 and involves farmers, small food artisans, fishermen, solidarity-based purchase groups, a consumers' association, agronomists, cooperatives. On the basis of a shared willingness to promote and valorise organic farming, the different actors involved have undertaken a processes of reorganization of the local organic food production-provision system. More recently their commitment has developed to include a broader mobilization around food issues and, more generally, around sustainable development models.

02. INTERACTIONS WITH THE SOLINSA PROJECT TEAM OVER THREE YEARS

FIRST INFORMAL MEETING	1 st WORKSHOP	2 nd WORKSHOP	PARTICIP. INTERNAL MEETING	PARTICIP. PUBLIC WORKSHOPS (2) AND MEETINGS	LAST WORKSHOP
JULY 2011	NOVEMBER 2011	MAY 2012	NOVEMBER 2012	JANUARY-JUNE 2013	JUNE 2013

03. HOW TO SUPPORT A LINSA

- Continuative involvement in LINSA activities, becoming an integral part of the network
- Adaptability, establishing common rules of the partnership
- Opening windows of opportunities (financial resources, further linkages)

04. QUOTATIONS AND PICTURES

Establishing relations

Creating experience

Trust building.....

The WORKSHOP...

You come in a phase of big change. The group is growing and producing a lot of stimuli from outside. We have to react to them but, at the same time, we need to clarify some internal aspects, to improve our organization (Bianchi - IAS, sociologist)

Sometimes we have conflicts because of the different views between producers and consumers and their association... There are two ways to look at the group, but there is the will to improve to go hand together. It is right that these problems arise at the presence of people that can help us to face them. (Fornaciari - Farmer)

Considering SOLINSA...

You come just at a crucial moment. We have started to discuss about internal rules. It is an important step to create stable our organization... We have tried to consult the one to interact with the outside. We are much involved in them. So we need to know and find a clear identity and mission. And we always mention SOLINSA now! (Bianchi - Farmer, Cris. president)

SOLINSA project is fantastic! We are happy that you chose us. We were thinking reflection on the way through which the group could connect around common sense and goals. SOLINSA project could come in handy for that. (Augusti - IAS - sociologist)

Exchanging some final ideas.....

