



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

solinsa.net

SUSTAINABLE AGRICULTURE NETWORK (RESEAU AGRICULTURE DURABLE)

LINSA Case Study Report: France

Delphine Neumeister & Anne-Charlotte Dockès

OCTOBER 2013

Project Number: 266306
FP7 – KBBE – 2010 –4



Funded by the
European Union



SEVENTH FRAMEWORK
PROGRAMME

This report only reflects the views of the author(s).
The Community is not liable for any use that may be made of the information contained therein.

| Project funded under the Seventh Research Framework Programme of the European Union | | |
|--|---|---|
| Dissemination Level | | |
| PU | Public | x |
| PP | Restricted to other programme participants (including the Commission Services) | |
| RE | Restricted to a group specified by the consortium (including the Commission Services) | |
| CO | Confidential, only for members of the consortium (including the Commission Services) | |

Partners in the Solinsa projects are :

- Heidrun Moschitz, Robert Home, Research Institute of Organic Agriculture (FiBL), Switzerland
- Gianluca Brunori, Adanella Rossi, Antonella Ara, Elena Favelli, University of Pisa, Italy
- Julie Ingram, James Kirwan, Chris Rayfield, Nigel Curry, Damian Maye, CCRI (University of Gloucestershire and University of West of England), United Kingdom
- Dirk Roep, Laurens Klerkx, Frans Hermans, Wageningen University, The Netherlands
- David Bourdin, Kim Anh Joly, Niels Rump, Pierre Praz, AGRIDEA, Switzerland
- Dominique Barjolle, Loredana Sorg, Federal Institute for Technology, Switzerland
- Talis Tisenkopfs, Sandra Sumane, Ilse Lace, Baltic Studies Centre, Latvia
- Anne-Charlotte Dockès, Delphine Neumeister, French Livestock Institute, France
- Volker Hoffmann, Simone Helmle, Stefan Burkart, University of Hohenheim, Germany
- Gusztav Nemes, Judit Kis, Viktória Tési-Páll, Agnes Varga, Zoltan Bakucs, Institute of Economics of Hungarian Academy of Sciences, Hungary

TABLE OF CONTENTS

| | | |
|----------|---|-----------|
| 1 | SUMMARY | 1 |
| 1.1 | LINSA description :..... | 1 |
| 1.2 | Main findings:..... | 1 |
| 2 | INTRODUCTION | 2 |
| 2.1 | Description of the LINSA: | 2 |
| 2.2 | Why is it a LINSA? | 2 |
| 2.3 | Main aims of the analysis: | 3 |
| 3 | METHODS..... | 3 |
| 4 | RESULTS OF THE ANALYSIS..... | 4 |
| 4.1.1 | Mechanisms of network development, learning and innovation processes and connections with the formal AKS systems | 4 |
| 4.1.2 | Mechanisms of network development, learning and innovation processes and connections with the formal AKS systems | 5 |
| 4.1.3 | Learning approaches, methods and tools used in LINSAs | 7 |
| 4.1.4 | Tasks, roles and emerging quality needs for the knowledge and skills of actors and institutions. | 8 |
| 4.1.5 | Support measures which are most effective and cost efficient | 9 |
| 4.1.6 | Evaluation criteria used for assessing the effectiveness and cost-efficiency of support measures that are exploited by LINSA..... | 10 |
| 4.1.7 | Operational tools that AKS actors (policy actors) could use to improve support for LINSA and to enhance the capacity of involved actors, in order to foster successful LINSAs | 10 |
| 5 | CONCLUSION..... | 11 |
| | APPENDICES | 13 |
| | FORAGE RAMI: METHODS USED | 13 |
| | SCALE SYNTHESIS REPORT | 14 |
| | ORIGIN AND FUNCTION + TEMPORALITY SYNTHESIS REPORT..... | 17 |
| | DEGREE OF INTEGRATION SYNTHESIS REPORT | 19 |
| | LEVEL OF INNOVATION SYNTHESIS REPORT | 22 |
| | LEVEL OF LEARNING | 24 |
| | GOVERNANCE | 27 |
| | LINKS TO THE AKIS | 29 |

EFFECTIVENESS AND COST EFFICIENCY32

1 SUMMARY

1.1 LINSAs description :

The Sustainable Agriculture Network gathers groups of farmers and promotes economic and ecological farming systems, with a real paradigm shift from the productivist model of agriculture. It works for the recognition of this respectful agriculture by the public authorities and was created in reaction of the lack of alternative views within the traditional AKS. The RAD involves 3000 farmers (from 2000 farms), mainly from the west of France, gathered in 32 groups. It has recently been involved in the development of the forage rami, a strategic game whose goal is to experiment virtually livestock farmers' adaptation to climate change or other stresses. The RAD is facing different opportunities of development and needs to choose how to grow and expand its knowledge.

1.2 Main findings:

The study of the RAD was conducted using different research methods: individual interviews with members of the LINSAs, literature reviews and 6 workshops involving 6 to 40 members of the LINSAs.

Our main findings are the following:

- The RAD is a non institutional network of farmers groups, created and developed outside the AKS as an alternative way of thinking to answer a specific demand not taken in charge by the traditional AKS. However connections exist with the AKS thanks to national projects and working groups.
- The RAD is a national disposal. Farmers ensure the governance of the RAD but leave to the groups the choices of the subjects and the way of functioning.
- The main objective of the RAD is improving the effectiveness of the systems regarding ecological, social and economical issues. Sustainable development is essential.
- The RAD promotes a radical innovation process, but step by step, which aims to help alternative farmers to build their own pathway towards sustainable agriculture.
- Learning is a top priority of the RAD who gives value to bottom-up view of innovation and participatory learning processes. Learning processes contrast with learning in the traditional AKS.
- The forage rami is an example of advisory tool which aims at placing users in management situation and its originality is based on the articulation of scientific and empirical knowledge.
- The RAD faces financial issues due to uncertainty, irregularity but also lack of recognition. Very few supports come from the AKS.
- The RAD is now facing a dilemma concerning strategic decisions: whether it gets more connected to the AKS, how it continues its development, whether it takes part or not to more projects.

- Slowly ideas defended by the RAD become more and more important in the traditional AKS: the network is being more and more recognised for its work but it has not brought yet financial valorisation.

The RAD case study illustrates the potential use of innovative learning processes among the AKS (forage rami) and stresses the factors necessary to reach LINSAs' objectives which do not match to the traditional AKS ones. The SOLINSA approach enabled to show the role of participatory methods in the learning processes and to compare the difference between researchers' expectations and LINSAs' ones.

2 INTRODUCTION

2.1 Description of the LINSAs:

The Sustainable Agriculture Network gathers groups of farmers and promotes economic and ecological farming systems, with a real paradigm shift from the productivist model of agriculture.

The first groups were created in the beginning of the 1980s, in reaction of the lack of alternative views within the traditional AKS. The RAD has gathered these groups since the beginning of the 1990s and works for the recognition of this respectful agriculture by the public authorities.

The RAD has recently been involved in the development of the forage rami, which is a strategic game whose goal is to experiment in a virtual way livestock farmers' adaptation to climate change or other stresses. This tool aims at placing users in management situation and its originality is based on the articulation of scientific and empirical knowledge.

The RAD involves different scales of actors:

- 3000 farmers (from 2000 farms), mainly from the west of France
- 32 groups which gather these farmers
- Facilitators for each groups, most of the time employees of the group itself
- Coordinators at the national level, employees of the RAD

2.2 Why is it a LINSAs?

The Sustainable Agriculture Network is a LINSAs regarding the following aspects:

- Its main object of study is sustainability of agriculture, considering ecological aspects but also economical and social aspects;
- The groups aim at producing new references and testing new techniques, taking part to the production of new knowledge about sustainable agriculture;
- Different groups are interacting to share their findings, in order to produce new knowledge about sustainable agriculture.

By choosing the RAD as a LINSAs, we focused on the following aspects:

- The forage rami: we wanted to see how it could develop and how a new tool aimed at facilitating advisory in forage production and developed in partnership of members of the AKS could be used by a LINSAs outside the AKS and used to participatory approaches.
- The development of links with the AKS: the RAD was created and remains outside the AKS but is establishing links with it. The relationships between both were really interesting for us.
- Radical innovation and bottom-up learning approaches: the sustainable agriculture vision of the network and the learning approaches are different from the traditional ones, hence an important interest to see how knowledge is created and shared.

2.3 Main aims of the analysis:

The analysis of the RAD had two main goals:

- Answering the SOLINSA project's needs: analysis of some characteristics of the functioning, as scale, origin & function, governance, level of learning, level of innovation, link with AKS, efficiency & effectiveness of supports.
- Answering the LINSAs needs: analysis of a new tool for advisory in forage production (the forage rami); identification of factors which could have an impact on the future of the RAD and establishment axes of work for the next years.

3 METHODS

We conducted preliminary interviews and did literature reviews to analyse the needs of the LINSAs. The French Livestock Institute (SOLINSA partner) had already worked with the RAD on a national research development project. The expectations of the RAD's members were not the same as the SOLINSA project's needs, but we chose to concentrate on the LINSAs needs and to answer to SOLINSA project's needs thanks to individual interviews.

We then organised two different series of workshops:

3 workshops on the future of the RAD:

The first workshop (24.06.12) focused on the identification of key-factors for the future of the RAD. The second workshop (May 2013) was a virtual survey which aimed at analysing the visions of the future of the RAD by its members. The third workshop (20.06.13) was about identifying actions for the future of the RAD based on the results of the survey.

3 workshops about the forage rami:

The two first workshops (11.06.12 and 18.07.13) were about testing a strategic game which aims to improve grass production at farm level (the forage rami). For more information, report to appendix. The objectives of these sessions were:

- adapt the virtual farm built by the participants to the framework of year 2011, which spring has been especially dry in France
- increase the amount and the use of grass in the farm

The third workshop (April 2013) aimed at monitoring the sessions of the forage rami through a video, after having specified a detailed evaluation plan.

Most of the workshops were monitored through an evaluation.

Regular contacts were kept with the LINSAs during the whole project. We also took part to some internal meetings of the network, in order to understand better its functioning.

4 RESULTS OF THE ANALYSIS

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

4.1.1.1 Opportunities for the RAD

- Members and coordinators/facilitators are motivated: technical expertise, reactivity, complementarities between farmers and coordinators, diversity of groups etc.
- Representative role of the RAD in the public authorities and lobbying activities (CAP reform), which offers to the network the opportunity of conveying its ideas
- Strong federative values, which gives the network many boundary objects: agricultural development and systems' sustainability, proximity with the field, permanent innovation
- Reinforcement of the link with the research/development organisms and consumers associations, which multiplies partnerships and collaboration
- Leadership on agroecology which gives legitimacy to the network

4.1.1.2 Constraints for the RAD

- Complexity of the internal organisation (link with the FNCivam, groups' articulation etc.), which triggers off administrative and organisational complications
- Geographical splitting of the network: meetings are far away and the comparisons are difficult between the different production systems
- Lack of human and financial resources, which decreases the actions that could be settled
- Lack of communication within the groups, which causes lack of cohesion

- Implication in institutional project: difficulties to prioritize the way of using time (for specific projects or internal reflexion)
- Changes of politics: inconstant, CAP not in favour etc. which makes difficult the long term perspective
- Decrease of number of farmers, which can have an impact on the network members

4.1.1.3 Support needs for successful LINSAs:

To be successful, the RAD has specific needs:

- Technical support on some specific points like production costs, health etc.
- Financial support: the financial resources of the RAD are not permanent, which causes some difficulties in planning projects. Most technicians stay a couple of years before leaving the network because the incomes are low.
- Political support: the RAD works hardly to defend at the national and international levels (CAP) the concept of supplies dependent on economical and social aspects and grass production. All attempts have been disappointing for the network because even if their ideas are heard there are still no concrete facts (specific supplies). Moreover, they consider unfair to see that people using non respectful practices (too many pesticides for instance) receive help for decreasing their use, whereas the RAD who already promotes practices respectful does not receive any supplies for the very same reason: they already work well enough and therefore do not need supplies.

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

4.1.2.1 Network development

Since the 80's, some livestock farmers have experimented less intensive farming practices, firstly in Brittany. Their main idea is to conciliate productive agriculture and environment. Dairy farmers from the West of France built the first groups, to produce milk from grass and clover, rather than from maize and fertilizers.

In 1994, 11 local groups of farmers created the "Sustainable Agriculture Network" (RAD), to share ideas and hire advisers. Other groups progressively joined the network. Today the RAD is made of 29 groups, 3000 farmers representing 2000 farms. They are mainly livestock farmers (crops and animal production), from the West of France.

The RAD supports farmer groups who wish to join them. The development is a progressive process, by cooptation of local groups. The RAD also belongs to a larger network the "National Federation of the Centres of Initiative for Rural Development" (FNCIVAM) which promotes knowledge diffusion in rural areas, rural development initiatives, and conciliation of agriculture and environment. FNCIVAM is the advisory and knowledge system of alternative farmers and rural actors (132 local groups).

The RAD is wondering whether it should grow or not: the small size of the network (about 3000 farmers) enables to keep a strong capacity of innovation and to remain a niche, whereas a bigger number would mean a decrease of this capacity of innovation. This aspect is also one of the main current questions within the RAD: should it develop by expansion of the number of groups or by conveying their ideas within the traditional AKS?

4.1.2.2 Learning and innovation processes

- Mutual engagement, joint enterprise, shared repertoire

The members of each groups share a vision, common objectives, work together on their practices and make them evolve towards sustainable agriculture (organic or not). Each group hires an adviser who shares their ideas and visions and facilitates innovation and practice change.

The RAD itself hires 3 experts and facilitators who manage the network, organise exchanges among farmers and advisers and participation to national or regional research projects. Farmers and advisers of the RAD share the willingness to promote an alternative way of farming and an opposition to intensive ways of production and to build innovative practices to reach that objective.

The practices are elaborated on farms, through discussions among farmers, between farmers and advisers, and through training courses. Some groups also get involved into research projects (about grassland, grazing, organic production, decrease of pesticides ...).

- Boundary work

Two boundary objects (or boundary work) can be presented:

- The first is the dairy production approach elaborated in the 80's by André Pochon (a Farmer from Brittany), based on grasslands associating clover and Ray Grass. The method itself wasn't revolutionary but launched the debate about productivist methods and about the environmental issue in Brittany. It is still emblematic for alternative livestock production and central for the RAD.
- The second (developed in workshops) is a strategic game named "Forage Rami". It aims at facilitating the reflexion of a group of farmers about forage system and forage autonomy.

4.1.2.3 Connections with the formal AKS

The RAD has existed since the 1980s and was created voluntarily at the margin of the AKS. The motivation of the creation came from the fact that the top-down approaches of the traditional AKS were unsatisfying and there was no room for alternative points of view. The RAD has remained completely outside the AKS for a long time, with no connections to it. At the end of the 1990s, with the increase of the RAD's activity and especially applied research, links with technical institutes began to appear, for instance with the French Livestock Institute.

The RAD now takes part to some research-development project financed by the French Ministry or Europe, as a partner. The RAD is also present during the negotiation of the new CAP by giving its point of view and producing references, it tries to express its ideas (supplies social conditioned, grass supplies etc.), but all attempts have been disappointing for the moment, even if its ideas begin to influence the AKS's ones. Technical institutes have begun to involve the RAD in many projects because they find their work really interesting (for instance, the forage rami has been tested among RAD's groups). The RAD is also interested in developing connections with technical institutes. The French Ministry has lately "discovered" the network and finds it really interesting, which can be an opportunity for new connections.

Connections can be formal (through identified projects, participation to CAP discussions etc.) but also informal (discussions, AKS using the RAD as a case study etc.). Consequently, connections to the AKS do exist, but the network still claims for its independency. As far as advisory services, education and training are concerned, the RAD has its own methods, based on bottom-up approaches (see report about learning) and does not use the one from the traditional AKS.

4.1.3 Learning approaches, methods and tools used in LINSAs

Learning is the reason of existing of the network and stands for top priority. According to the RAD, transition towards sustainability is seen as a pathway that farmers and advisers can follow at their own rhythm, and in their own direction. All the members of the network are supported to initiate an individual reflexion about their history, their present situation and their priorities about sustainability. Individual and collective projects are built about environment, solidarity, produce quality, economic efficiency, quality of life etc. But each project must consider the different « pillars » of sustainability (Economic, Environmental, Social, and Ethical).

The members of the network share the same view on agriculture and aim at promoting sustainable farming practices (low cost production and farm autonomy). The knowledge construction is structured around these ideas.

The RAD has a clear vision of knowledge sharing: they don't make recommendations or support any specific model, but they share successful experiments in order to give reflexion's elements to the other farmers of the group. Each group can focus on different subjects (technical, social, economic etc.) and are free to deal with it as they prefer. In that sense learning is not managed by the national level, but by the local one, and corresponds with the bottom-up learning approach. This way is necessary to make sure that the techniques elaborated answer specific needs of farmers involved.

The approach is based on group dynamic animation, on knowledge sharing at different levels, not on advice:

- The group of farmers chooses a subject they want to work on.

- The facilitator in charge to support this group organises meetings on farms, in cooperatives or other places related to the subject. The technician is not a specialist of the subject, but builds his own skills based on farmers' experience.
- The group can find information in other group (through Internet hub for instance) or mobilise scientists to provide relevant information, or carry out specific investigations or trials
- Farmers share their practices and ideas on this subject; the facilitator coordinates and animates the discussions.
- Each farmer can build his own way of thinking on this subject.

Social learning can also be approached among the subjects chosen by the groups: question of work, of relationship between farmer and animal, of short supply chains, of relations with citizens etc. As each group is free to organise its time and preferences as he wishes, organisational learning is not the main point in the RAD.

4.1.4 Tasks, roles and emerging quality needs for the knowledge and skills of actors and institutions.

Farmers gather into groups to develop their skills on a subject. Thanks to experiment sharing and discussions, they can choose which methods suit best to their specific farm. In that sense learning is both individual and collective. Individual and collective approaches can also alternate, as long as it remains a bottom-up process. Facilitators (which can be considered as knowledge brokers) also have to build their own knowledge: farms' visit, groups sharing, Internet review and reading are ways of improving it.

Consequences for education and training

The RAD has specific needs regarding knowledge:

- Technical needs:
 - Historically, the RAD has been working on the development of grazing. This point remains one important one for the local groups. Some technical points remain really important in the process of learning for farmers: soil, animal food for instance. With the difficult economical context, the study of production costs is taken more and more importance in the needs of farmers, even if the reduction of costs has been one of the key-point of the RAD since its beginning. Technicians have to develop ways of dealing with this subject.
 - Needs of "new" approaches on animal health (for example the use of observation, like Obsalim method), on biodiversity, or on the development of pasture have also been expressed by the farmers. Some groups already work on these subjects.
- Organisational and communication needs: the RAD needs to develop communication among the network to facilitate exchanges. The governance of the structure is not clear for every members and could be improved.

- Financial needs: in order to develop new projects and tests and produce references, time for research and implementation, material are needed.
- Recognition of the status of “farmer researcher”: the RAD’s farmers are used to test and experiment new and alternative techniques on their farm, without receiving any financial supplies. Consequently they take risks which are not covered by insurance or other tools. A feeling of injustice can appear when their successful techniques are applied by a larger amount of farmers (ideas conveyed then by advisory services of the traditional AKS). But most of the members prefer seeing their techniques being applied (because it is better for the environment and for the social work of farmers) even if the recognition does not exist.

4.1.5 Support measures which are most effective and cost efficient

As the RAD benefits from very few supports mainly financial from the AKS, all of them are important because they enable the economic survival of the RAD. The RAD benefits from the following supports:

- Regions and ministries of agriculture and environment provide money in the framework of regional or national projects. Research projects have a three-year subsidy, whereas other projects can spread from 2 to 4 years.
- European Union provides some financial support in the framework of European projects.

The selling of deliverables produced by the RAD enables to earn some money. So do the training sessions of technical topics organised by the network. Also members’ subscriptions bring some money. These subscriptions are paid every year (member ship fee).

Goals of the network can be achieved thanks to the involvement of farmers and facilitators who share their time and experiments for developing new techniques more respectful for the environment.

Thanks to the “voluntary work” of the farmers, the RAD can be considered as rather cost efficient: they produce references, new learning approaches, new techniques etc. The knowledge is shared within the group and the RAD if it is judged useful and relevant. Some ideas and techniques developed by the RAD can also been used within the traditional AKS, in that sense every farmer can be a potential beneficiary of the supplies. At a larger scale, the environment, by extension the society, are beneficiaries as well, as practices conveyed by the RAD promote economic and ecological farming systems.

4.1.6 Evaluation criteria used for assessing the effectiveness and cost-efficiency of support measures that are exploited by LINSAs

There are no specific assessment of the effectiveness and cost efficiency of projects. Benefits from national project are difficult to evaluate: the research work is interesting but does not always answer to the specific needs of the RAD. Consequently, the time spent in these projects can be too important: the qualitative assessment shows that the question of getting involved or not in these projects is relevant.

The RAD needs to spend lots of time finding new financial supports, as none of them are permanent. Time spent for that mission is not clearly identified or evaluated.

The effectiveness of support concerning sustainability is obvious: farmers involved in the network benefit from technical support which facilitate reflection and settlement of new practices, which are environmental friendly and using less inputs than the previous ones. The farmers' word is one criteria: conviction about the changes made, better way of life etc. Publications and research projects also show the benefits of practices promoted by the network.

4.1.7 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 study of the RAD emphasises some aspects that should be developed or improved in order to facilitate the development of LINSAs, especially for those existing outside the AKS:

- **Recognise the work done** by the LINSAs (references about new techniques, alternative knowledge processes etc.) in order to give credit to their methods. Political and financial supports are essential to ensure the lasting of the LINSAs.
- **Facilitate the access to the training funds** could be a really big opportunity for the RAD: The traditional AKS has its own training fund (Vivea) but to benefit from it you have to follow the methods proposed by it. It is open to the RAD but the local and rather informal groups meet some difficulties to fulfil the regulatory conditions of the training fund. But for the moment, the RAD considers that it mainly concerns top-down training and validated information, which is contrary to RAD's vision. In fact, the actors of the fund consider that their approach is more open minded than before and that the RAD could benefit from the fund but a better knowledge of the two networks has still to be built.

- The French AKS is not well organised to foster innovative groups or networks. There are few activities about innovation and change management. **Promoting and using new approaches** like bottom-up processes could also be an opportunity for the AKS system, especially in a difficult context.
- **Involve field experiment in research and scientific approaches**, in order to answer the reality “of the field”. LINSAs have an essential role to play in this aspect because of their direct link with fieldwork. In the same time, **accept the fact that a LINSAs can remain outside the AKS** in order to keep its reactivity and innovative work.
- **Associate agricultural and social aspects of farming systems**, in order to adopt a global and more relevant view of challenges. This idea comes with the necessity of preserving the attractiveness of the farmer’s job in order to prevent the important decrease that agriculture has been facing for a couple of decades.

5 CONCLUSION

Evaluation of the process of the research

The Sustainable Agriculture Network was really interesting to study because it was very different from other networks we are used to work with.

Learning approaches are essential in this network and focus on bottom-up processes and sharing results, which differ from the learning processes of the traditional AKS. The Forage rami is an interesting illustration of the potential use of innovative learning processes among the AKS: it was tested successfully within the RAD, partly thanks to the fact that farmers were already used to participatory approaches and in search of new systems. There are some innovative tools which cannot be transposed to all farmers. However the game emphasises the benefits of the articulation between scientific and empirical knowledge, showing the interest of developing co-working and co-research between LINSAs and AKS.

This case study stresses the importance of voluntary work and personal motivation necessary to reach objectives which do not meet the traditional AKS ones. Indeed, even without being paid or recognised, farmers and facilitators work together to find better systems for the environment and the farmers’ life.

Although the ideas conveyed by the RAD are being more and more taken into account by the AKS, remaining outside the AKS facilitates its position of radical innovator. It enables to keep a strong capacity of innovation and to remain a niche, whereas conceiving innovative systems for all farmers could mean a decrease of this capacity of innovation. It will be interesting to see whether the RAD chooses to develop thanks to groups’ multiplication or by having its ideas more and more integrated within the AKS.

Another important aspect of the meeting between the RAD and the SOLINSA project is the discrepancy that can exist between researchers' and LINSAs' needs. Indeed LINSAs are not always interested in researchers' questions and we had to deal with a double goal during the workshops: answering LINSAs' needs (accompanying the LINSAs) and researchers' questions (studying the LINSAs). Co-working can be effective only if everyone finds its own interest, hence the necessity of analysing precisely the needs of the LINSAs before beginning the co-working. We observed this problem in our 2 LINSAs.

Finally the SOLINSA project enables us to illustrate how participatory approaches can help the reflexion within a LINSAs. For instance the RAD could test a new advisory tool for forage production: it triggered off constructive discussion about farming management, technical and economic lines and practices. The collective approach offers new ways to answer the problem that livestock systems have to cope with. As such the tool facilitates the practical co-design of sustainable farming systems. This innovative learning process offers new horizons for training (students, teachers, farmers etc.). The evaluation of the workshops showed the interest of the participants for sharing and discussing about the future of the RAD, the elements which may cause some disturbance etc. Nevertheless as participatory approaches involve people, some difficulties were met concerning actors availability.

Support needs include:

- Recognise the work done by the LINSAs (references about new techniques, alternative knowledge processes etc.) in order to give credit to their methods
- Facilitate the access to the training funds
- Promoting and using new approaches like bottom-up processes
- Involve field experiment in research and scientific approaches
- Associate agricultural and social aspects of farming systems, in order to adopt a global and more relevant view of challenges.

APPENDICES

- Appendix I Add any descriptive material, details of the LINSAs, methods used etc.

FORAGE RAMI: METHODS USED

The aim of “Forage RAMI” is to build a farm (animal lots, surfaces, crops) which can face climatic stress and which can reach autonomy for animal food. The material of the game is composed of a board and different sets of cards (types of animals with their needs, alimentation during the year, types of crops) and a computer program which calculates if needs and offers match. Calculation is based on local agricultural and meteorological data. Only the moderator enters the data in the computer all along the game. He shows tables and graphs to the farmers who can revise the system they built to improve the farm performances.

1. The origin and the aim of the game were explained to the farmers
 2. The farmers decided the major lines of the farm they wanted to build and the constraints they wanted to challenge (total surface, 30% superficial soil, herd size)
 3. Farmers discussed together to define all the fine parameters of the farm.
 4. The computer compared needs and offers and farmers had to adjust to reach the balance in the context of a mean climatic year.
 5. Then the exercise was done again in different frameworks; year 2011, which spring has been especially dry in France ; increasing grass production on the farm etc.
 6. At the end of the session, participants were asked to give their opinion on the game and the results they reach (were the simulations acceptable?).
- LINSAs reports prepared for the analytical characteristics here

These comprise, in order:

Scale;
Origin and function;
Integration;
Innovation;
Levels of learning;
Governance;
Links to the AKIS;
Effectiveness and efficiency.

SCALE SYNTHESIS REPORT

Method: Individual interviews, Workshops, Internet review.

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

Degree of formality and level of complexity:

The Sustainable Agriculture Network gathers local groups of development in order to help them to coordinate federative projects together. The organisation is rather complex, because of the implication of many different networks and groups (see question 2). On the contrary, the level of formality is low, because of the high independence of each group and the weak links with the traditional AKS.

Embeddeness:

The RAD was created on the fringe of the traditional AKS and is not yet really included in it. More and more links are being built between them, but the RAD remains independent. Members of the network are often members of the alternative unions in France, which is mainly in opposition of the traditional AKS, even though the network claims its political independence.

The RAD belongs to a higher level network of alternative farmers’ groups (National Federation of CIVAM).

Diversity of actors involved:

- 3000 farmers from 2000 farms
- 32 local groups
- 1 (to 5 occasionally) advisors/facilitators in each group
- 3 facilitators for the national network
- A national board, mainly made of farmers involved in the local groups

The professional board is composed of about 20 farmers, representing the local groups

Geographical coverage:

The RAD brings around 3 000 farmers together, mostly consisting of livestock systems. The 29 local groups are located in 8 regions, mainly represented in the

west part of France, due to historical reasons. Some isolated groups from other regions also take part to the network.



National coverage of the local groups : 8 regions on the west part of France

Diversity of activities:

The most important debates the network is working on are :

- Promoting more efficient systems regarding inputs and economic issues, and linked to the soil
- New CAP : position in favour of more social, economic and environmental oriented measures, including measures for grass production
- Enabling farmers to produce enough without using too many inputs
- Facilitating the self learning by giving examples of situations but not giving the golden rule to follow

In order to fulfil these objectives, the RAD works on common studies with the local groups, involving researchers when needed, and organises training for farmers and students.

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

The Sustainable Agricultural Network is a national network which includes different groups of development: CIVAM (Initiative centers to promote agriculture and rurality), Cedapa (Research centers for an agricultural development more autonomous), GAB (organic farming groups) etc.

The groups of development are mostly regional groups; some of them (the CIVAMs) are gathered into another national network, which also federates other kind of farmers' groups, the FNCIVAM (national federation of CIVAMs). The RAD and the FNCIVAM work together on development aspects, like the improvement of the farms' autonomy regarding inputs. Consequently, the LINSIA is not a formal network and the organisation of the network is rather complex: groups of development belong to two different national networks, but both of them work narrowly together. Each regional group has its own governance.

These groups of development coordinate local groups of farmers (around 10 groups of 20 to 100 farmers) who regularly meet to exchange about subjects they choose. They share the same goal: improving farmers' and systems' autonomy regarding inputs. A facilitator (from one group of development) helps them to arrange their meetings and to formalise their ideas.



The regional groups of development may be compared to 1st level networks (coordination of groups of farmers) and the RAD would be considered as a 2rd level network, as it brings link between the 1st level networks.

Key bullet points

- A national disposal, but local groups keeps a strong independence
- Professional governance
- Not included in the traditional AKS

One main objective : improving the effectiveness of the systems regarding inputs and economical issues

ORIGIN AND FUNCTION + TEMPORALITY SYNTHESIS REPORT

- Method: Individual interviews, Workshop, Internet review.

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

In the early 1980s, some farmers grouped together to experiment autonomous production systems. Different independent groups were created, but remained quite isolated from each other. All these groups were located in the North-West of France (Brittany, Pays de Loire) and focuses on different subjects linked with sustainable agriculture, like the reduction of charges, the cessation of the use of soya etc. The lack of alternative points of view in the traditional AKS at this time was the main reason of the creation of these groups: they were looking for other ways of producing, thinking and learning.

The government provided human help for these groups, by providing agents to follow them and bring some technical advices and facilitation tools. Two of these agents were strongly involved in the construction of the RAD: in 1994, 11 groups, mainly Cedapa and GAB, decided to emphasize their action and created the “West Sustainable Agriculture Group”, later renamed Sustainable Agriculture Network in 1997.

At this time, some strong links with civil society were established. Nowadays this relationship may have lost some intensity but remains really good.

At the beginning, only breeders of ruminants were involved in the network. Polyculture systems got involved from 2003 on.

Main issues at stake, debates:

In 1994, farmers’ first project was to write requirements about farming which stresses inputs’ economy. It took the form of an “agro environmental measure”, which is a specific premium for farmers who follow specific requirements in specific areas. Later, it was widened to all areas in France, taking the name of an “exploitation territorial contract”.

The RAD also developed an activity of building references and documents, in order to provide information to farmers but not rules to follow: one of the main objectives of the RAD is to enable everybody to build its own system independently.

The CAP has evolved a lot in the last 20 years. The RAD has constantly defended the development of supplies related to social approaches and economy, and the settlement of a grass premium, by providing references and studies showing

the benefits of grass production. Apart from the settlement of a small premium with the “Plan Barnier”, they have not received satisfaction yet, and are still claiming their will for the new coming PAC in 2014. It is one of the main disappointments of the network. The network also demands the creation of a premium’s cap considering the number of hectares per worker.

In order to have a bigger impact at the national level, the RAD and the FNCIVAM has developed strong links and work together on some subjects. The RAD is a member of the FN CIVAM.

As the RAD was created on the fringe of the traditional AKS, its ideas have not been shared with it for a long time. Now, we can see some development of closer ties between them, especially in the sustainable agriculture programs. The ideas of the RAD are not being completely adopted by the AKS, but some specific points are becoming more and more important in the AKS’s discourse as well.

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

The RAD has a professional board (about 20 people): each local group can delegate two people to attend the administrative board, which takes the political decisions and decides which main directions have to be followed. Once a year, during the annual general assembly, the administrative board elects the “governing board” or “consortium body” (7 people) which is more restraint and operational.

The RAD and the FNCIVAM take part to each other boards in order to share their visions and build common orientations. Each group follows the main directions chosen, but is free to launch its proper subjects and remains independent.

The RAD has a specific functioning: there is no direct financial link between the national network and the local groups. The local groups pay a contribution to the RAD and can ask for support from their regions. The government, regions and Europe can provide some financial support.

The financial support is rather unstable and uncertain. At the beginning, the livability of the network was unsure and financial supports were for a certain time. Most of the finance comes now from the different answers to call for projects won by the network, mostly based on a 3-year long basis. In this case,

the RAD repays to the local groups part of the money in exchange of some work for the project.

A specific fund for development of rural agriculture (DAR) exists, but is not very used yet by the network. It would be an interesting way of developing support.

Key bullet points

- A network created after the creation of the groups
- An alternative way of thinking and built to answer a specific demand not taken in charge by the traditional AKS
- Financial issues due to uncertainty and irregularity
- Ideas defended which become more and more important in the traditional AKS

DEGREE OF INTEGRATION SYNTHESIS REPORT

Method: Individual interviews, Workshop, Internet review.

Anne-Charlotte Dockès, Delphine Neumeister, Brigitte Frappat (4 June 2012)

What are the mechanisms of network development?

Since the 80's, some livestock farmers have experimented less intensive farming practices, firstly in Brittany. Their main idea is to conciliate productive agriculture and environment. West of France dairy farmers built the first groups, to produce milk from grass and clover, rather than from maize and fertilizers.

In 1994, 11 local groups of farmers created the "Sustainable Agriculture Network" (RAD), to share ideas and hire advisers. Other groups progressively joined the network.

Today the RAD is made of 29 groups, 3000 farmers representing 2000 farms. They are mainly livestock farmers (crops and animal production), from the west of France.

The RAD supports farmer groups who wish to join them. The development is a progressive process, by cooptation of local groups. The RAD also belongs to a larger network the "National Federation of the Centres of Initiative for Rural Development" (FNCIVAM) which promotes knowledge diffusion in rural areas, rural development initiatives, and conciliation of agriculture and environment. FNCIVAM is the advisory and knowledge system of alternative farmers and rural actors (132 local groups).



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

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

The members of each groups share a vision, common objectives, work together on their practices and make them evolve towards sustainable agriculture (organic or not). Each group hires an adviser who shares their ideas and visions and facilitates innovation and practice change.

The RAD itself hires 3 experts and facilitators who manage the network, organise exchanges among farmers and advisers and participation to national or regional research projects.

Farmers and advisers of the RAD share the willingness to promote an alternative way of farming and an opposition to intensive ways of production and to build innovative practices to reach that objective.

The practices are elaborated on farms, through discussions among farmers, between farmers and advisers, and through training courses. Some groups also get involved into research projects (about grassland, grazing, organic production, decrease of pesticides ...).

About innovation and the RAD see other report.

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

Two boundary objects (or boundary work) can be presented :

- The first is the dairy production approach elaborated in the 80's by André Pochon (a Farmer from Brittany), based on grasslands associating clover and Ray Grass. The method itself wasn't revolutionary but launched the debate about productivist methods and about the

environmental issue in Brittany. It is still emblematic for alternative livestock production and central for the RAD.

- The second (that we'll develop in 1 or 2 further workshops) is a strategic game named "Forage Rami". It aims at facilitating the reflexion of a group of farmers about forage system and forage autonomy.

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

RAD can clearly be considered as a CoP. The farmers and advisers share a professional and a global view, build their practices together, and identify their objectives together in a participative way.

The CoP has 2 levels, each of them being a CoP :

- Each local group (about 70 farms and an adviser) creates very strong ties
- The network made of the 29 local groups (3000 farmers and about 30 advisers) have also very strong links through a national general assembly, and an active association desk. Farmers are very active in all the decisions concerning the network.

RAD also belongs to a larger network (FNCIVAM) which can itself be considered as a NoP: participants share practices, a vision, but the links among them are rather light.

RAD can on the other hand also be considered as an Innovation Network: one of the main objectives of the groups is to product innovative practices in order to improve the sustainability of the farming practices.

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

Key bullet points

- An alternative view of agriculture
- A network of farmers' groups
- Elaboration of innovative practices by farmers, in small groups

A CoP at local and national level

LEVEL OF INNOVATION SYNTHESIS REPORT

Method: Individual interviews, Workshop, Internet review.

Do the LINSAs display characteristics of incremental or radical innovations?

The RAD aims at promoting a sustainable agriculture. The website of the network presents sustainable agriculture as a way to answer to global issues through local action, a way to answer to the present generations' expectations, without hindering the future generations' development.

http://www.agriculture-durable.org/?page_id=112

The network doesn't promote one or two specific innovations, even if it refers to some "sustainable agriculture specifications" for livestock and for crops productions.

The idea is to help each local group, and each farmer in each local group to find his or her own way towards a more sustainable agriculture.

As the network promotes a paradigm shift, we consider that it mainly displays characteristics of radical innovation (even if each technical change can be seen as rather incremental).

How do LINSAs support socio-technical transition to sustainability?

The RAD has been created in order to support transition to sustainability in agriculture. That is its main objective.

Transition towards sustainability is seen as a pathway that farmers and advisers can follow at their own rhythm, and in their own direction. All the members of the network are supported to initiate an individual reflexion about their history, their present situation, their priorities about sustainability. Individual and collective projects are built, about environment, solidarity, produce quality, economic efficiency, quality of life ... But each project must consider the different « pillars » of sustainability (Economic, Environmental, Social, and Ethical).

Is the LINSAs a novelty, a niche or a change in the regime?

The RAD works at a niche level: it is made of small groups sharing ideas, building and testing practices and making them known. About 1% of French Farmers belong to the network.

But the RAD also tries to challenge the existing regime and pull it towards a more sustainable agriculture. The RAD is more and more present in the national agricultural tender systems and develops as partnerships as possible with research and applied research organisations, and in some case with the conventional AKS.

Is the LINSAs 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?

On the one hand, the RAD has been organised by alternative agricultural actors, initially against the mainstream AKS. The network breaks the rules of the dominant system through the agricultural systems it promotes, but also through highly participative ways of coproducing knowledge.

On the other hand the main ideas promoted by the network about environment protection, about sustainable development are more and more supported within the mainstream AKS. The practices developed by the local groups of the RAD can be interesting for many farmers willing to improve their ways of production. For example the Clover and Ray Grass pastures have widely developed outside of the network, used by farmers willing to cut on fertilisers and improve environment and production costs. Several RAD groups also got involved into the "Ecophyto" network, launched by the Ministry of Agriculture to divide by two the level of pesticides in France. Some of their practices, elaborated at a local group level will be usable by many farmers everywhere in the country.

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

Key bullet points

- A bottom-up view of innovation
- A radical innovation process, but step by step
- Which aims to help alternative farmers to build their own pathway towards sustainable agriculture
- A niche work on sustainable development, but which challenges the regime.

- An increasing involvement in the AKS and the agricultural research tender system.

LEVEL OF LEARNING

Method: Individual interviews, Workshops, Internet review.

1. *What is the LINSAs approach to learning:*
 - *To what extent, and in what way, is learning coordinated, managed and/or formalised?*
 - *What are the tensions between formalised explicit (codified) approaches to leaning and non formalised implicit learning approaches?*
 - *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?)*

The RAD has a clear vision of knowledge sharing: they don't make recommendations or support any specific model, but they share successful experiments in order to give reflexion's elements to the other farmers of the group. Each group can focus on different subjects (technical, social, economical etc.) and are free to deal with it as they prefer. In that sense learning is not managed by the national level, but by the local one. The level of formalisation is quite low.

The members of the network nevertheless share the same view on agriculture and aim at promoting sustainable farming practices (low cost production and farm autonomy). The knowledge construction is structured around these ideas.

Process of learning

The approach is based on group dynamic animation, on knowledge sharing at different levels, not on advice:

- The group of farmers chooses a subject they want to work on.
- The facilitator in charge to support this group organises meetings on farms, in cooperatives or other places related to the subject. The technician is not a specialist of the subject, but builds his own skills based on farmers' experience.

- The group can find information in other group (through Internet hub for instance) or mobilise scientists to provide relevant information, or carry out specific investigations or trials
- Farmers share their practices and ideas on this subject; the facilitator coordinates and animates the discussions.
- Each farmer can build his own way of thinking on this subject.

Communication

The RAD has a view of the work done in the groups thanks to the facilitators' reports. They select interesting experiments to publish them in technical documents or on Internet hubs. The idea is to capitalise the knowledge exchanged within the groups. Mostly farmers' testimonies focusing on the evolution of production systems are published, in order to facilitate self decision on farm, and not to impose a vision to everyone.

Since its creation, the RAD has been standing outside the traditional AKS. The reason of the creation of the groups is directly linked to the question of learning processes: there was a specific need for participatory learning but it was inexistent in the AKS; therefore some groups began to emerge. Lately more and more links have been built between the AKS and the RAD, which testifies of a bigger interest for bottom-up processes in the AKS. The first groups were built in Brittany, in reaction to the dominant intensive system, to promote and share knowledge on Ray Grass and Clover pastures.

Can individual, social and organisational learning be identified? If so can they be separately characterised?

Farmers gather into groups to develop their skills on a subject. Thanks to experiment sharing and discussions, they can choose which methods suit best to their specific farm. In that sense learning is both individual and collective. Individual and collective approaches can also alternate, as long as it remains a bottom-up process.

Facilitators (which can be considered as knowledge brokers) also have to build their own knowledge: farms' visit, groups sharing, Internet review and reading are ways of improving it.

Social learning can also be approached among the subjects chosen by the groups: question of work, of relationship between farmer and animal, of short supply chains, of relations with citizens etc. As each group is free to organise its

time and preferences as he wishes, organisational learning is not the main point in the RAD.

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?*
- *To what extent is education, training and professionalization needed and provided?*
- *How much priority does the LINSAs assign to learning and identifying current and future learning needs?*

Learning is the reason of existing of the network and stands for top priority.

Technical needs

Historically, the RAD has been working on the development of grazing. This point remains one important one for the local groups.

Some technical points remain really important in the process of learning for farmers: soil, animal food for instance. With the difficult economical context, the study of production costs is taken more and more importance in the needs of farmers, even if the reduction of costs has been one of the key-point of the RAD since its beginning. Technicians have to develop ways of dealing with this subject.

Needs of “new” approaches on animal health (for example the use of observation, like Obsalim method), on biodiversity, or on the development of pasture have also been expressed by the farmers. Some groups already work on these subjects.

The RAD was at the origin of an European agrienvironmental measure of farm autonomy.

Financial needs

The financial resources of the RAD are not permanent, which causes some difficulties in planning projects. Most technicians stay a couple of years before leaving the network because the incomes are low.

The traditional AKS has its own training fund (Vivea) but to benefit from it you have to follow the methods proposed by it. It is open to the RAD but the local and rather informal groups meet some difficulties to fulfil the regulatory conditions of the training fund. Facilitating the access to the training funds could be a really big opportunity for the RAD. But for the moment, the RAD considers that it mainly concerns top-down training and validated information, which is contrary to RAD’s vision. In fact, the actors of the fund consider that their approach is more open minded and that the RAD could benefit from the

fund but a better knowledge of the 2 networks has still to be built. Promoting new approaches could also be an opportunity for the AKS system, especially in a difficult context.

2. Summarise your findings with 4-6 key bullet points

- Learning as top priority of the network
- A bottom-up and participatory learning process
- Training chosen by and adapted to each group
- A system which contrasts with learning in the traditional AKS
- A lack of money to develop it

GOVERNANCE

Method: Individual interviews, Workshops, Internet review.

How is the LINSAs governed/managed?

- *To what extent is the network governance inclusive/democratic?*
- *To what extent is the LINSAs institutionalised?*
- *How are communication, decision making, problem solving actioned? (see question 2)*
- *Do actors have sufficient skills/competencies for network governance?*

The RAD has a specific functioning: there is no direct financial link between the national network and the local groups. Therefore each group has its own way of functioning, depending on its size, on the number of groups etc. Decision making in the groups is completely inclusive, as the subjects treated are chosen by each group.

The national coordination is ensured by 3 people. They follow the common works (studies, publications, trainings etc.) with the facilitators of the local groups.

The RAD is not completely included in the traditional AKS and is not really institutionalised. The network advocates its autonomy from the AKS. In fact it also look for more acknowledgement from the traditional AKS and gets more and more frequently involved in the national discussions. The RAD also applies more frequently to national tenders.

Who has authority/control? (from qu2 of origin and function report)

- *What are the power relations: inside LINSAs and inside/outside LINSAs. Who is excluded from the LINSAs and why is he/she/they/it excluded?*

- *What are the different levels of governance*

The RAD has a professional (farmers) board (about 20 people): each local group can delegate two people to attend the administrative board, which takes the political decisions and decides which main directions have to be followed. Once a year, during the annual general assembly, the administrative board elects the “governing board” or “consortium body” (7 people) which is more restraint and operational.

The RAD and the FNCIVAM take part to each other boards in order to share their visions and build common orientations.

Each group follows the main directions chosen, but is free to launch its proper subjects and remains independent.

Each farmer who would like to join a group can contact the facilitator or the structure to be part of it. Nobody is excluded. An interest for the subject treated by the group is of course necessary.

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

Network efficiency should be judged first according to the results of the groups, as it is the main goal of the network. Of course, there are some differences between the groups; some of them work better than the other. Most of the time, the existent groups have a good functioning (otherwise they don't last). At the national level, funds are missing; the national team has few resources to develop bigger projects.

Key bullet points

- Professional governance
- Each group is free to decide its own subjects and way of functioning
- A non institutional network

LINKS TO THE AKIS

Method: individual interviews, workshops, participation to LINSAs meetings

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?*

The RAD has existed since the 1980s and was created voluntarily at the margin of the AKS, because farmers involved in this network could not find the knowledge they were looking for (alternative way of producing, against the productivist ideas conveyed by the AKS). The motivation of the creation came from the fact that the top-down approaches of the traditional AKS were unsatisfying and there was no room for alternative points of view.

Consequently, the RAD has remained completely outside the AKS for a long time, with no connections to it. The ideas conveyed by the network are quite close to one alternative farmers union called the “confédération paysanne” (farmers’ confederation), which is also outside the AKS.

At the end of the 1990s, with the increase of the RAD’s activity and especially applied research, links with technical institutes began to appear, for instance with the French Livestock Institute.

The RAD now takes part to some research-development project financed by the French Ministry or Europe, as a partner. The RAD is also present during the negotiation of the new CAP by giving its point of view and producing references, it tries to express its ideas (supplies social conditioned, grass supplies etc.), but all attempts have been disappointing for the moment, even if its ideas begin to influence the AKS’s ones.

Connections can be formal (through identified projects, participation to CAP discussions etc.) but also informal (discussions, AKS using the RAD as a case study etc.). Consequently, connections to the AKS do exist, but the network still claims for its independency.

As far as advisory services, education and training are concerned, the RAD has its own methods, based on bottom-up approaches (see report about learning) and does not use the one from the traditional AKS.

Opportunities for connection to the AKS do exist, with the development lately of common research projects. Technical institutes have begun to involve the RAD in many projects because they find their work really interesting (for instance, the forage rami has been tested among RAD's groups). The RAD is also interested in developing connections with technical institutes. The French Ministry has lately "discovered" the network and finds it really interesting, which can be an opportunity for new connections.

Barriers for connections to the AKS are rather high but do not prevent from some co-working on projects:

- RAD's ideas are based on bottom-up approaches, whether AKS's ones are more top-down. That was one of the main reasons of existence of the RAD.
- Sustainable agricultural ideas (not only ecological ones, also social and economical) are much stronger in the RAD than in the AKS, which causes a discrepancy between them.
- The RAD is wondering whether it should grow or not: the small size of the network (about 3000 farmers) enables to keep a strong capacity of innovation and to remain a niche, whereas a bigger number would mean a decrease of this capacity of innovation.
- Farmers members of the RAD do not always see the AKS positively and may not want to establish too many links with it; some would even prefer not to establish any.
- Some branches of the traditional AKS do not give value to the RAD. Moreover ideas conveyed by the RAD can sometimes be contrary to those conveyed by the main farmers unions, which have a strong impact on political decisions.
- Being considered as "alternative" is a key for innovation, whereas being involved in the AKS means adhering to its ideas and losing a part of this innovation.

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?*
- *Do the LINSAs 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 LINSAvalue or judge the AKIS? What is important to the Linsa 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 to they value LINSAs?*

The RAD has been used to develop without the help of the AKS. It exists because the traditional AKS could not meet its needs.

Some research and development projects, whether the RAD is involved or not, offer relevant information. Moreover this kind of projects offers financial supplies. The RAD is facing a dilemma concerning its involvement in national research development project. Indeed they offer financial supplies (the RAD has no stable financial income) but the time used to manage the project can be really important. The RAD is thinking about:

- Taking part only to project which directly answer their demand and research work
- Declining projects whose subject is too far away from their concerns, even if the financial aspects could supply them.

The RAD is also connected to another “alternative” network called FNCIVAM, also outside the AKS and which conveys the same ideas about sustainable agriculture. Links are really strong between these two organisations.

Most of members have a negative view about the political organisms of the traditional AKS (chambers of agriculture, farmers unions etc.) and do not want to work with them. On the contrary they do like working with technical institutes, organic associations, consumers associations etc.

The French Ministry however is paying more and more attention to the RAD because of the interesting approaches and outputs it has provided lately. The RAD is often asked to participate to working groups but the time spent is not paid, which is problematic for a network which does not have stable incomes.

The RAD is expecting recognition of their work from the AKS: they want their work to be given value and supplied. Indeed the RAD’s farmers are used to test and experiment new and alternative techniques on their farm. Consequently they take risks which are not covered by insurance or other tools. A feeling of injustice can appear when their successful techniques are applied by a larger amount of farmers (ideas conveyed then by advisory services of the traditional AKS). But most of the members prefer seeing their techniques being applied (because it is better for the environment and for the social work of farmers) even if the recognition does not exist.

This aspect is also one of the main current questions within the RAD: should it develop by expansion of the number of groups or by conveying their ideas within the traditional AKS?

Key points :

- A Linsa outside the AKIS in order to meet the needs that farmers could not find inside the AKS and a willingness to remain independent
- Some technical connections with the AKIS, especially the technical institutes
- Alternative views from the traditional AKS
- The RAD has to take strategic decisions: whether it gets more connected to the AKS, how it continues its development, whether it takes part or not to more projects.

A network being more and more recognised for its work but which has not brought yet financial valorisation.

EFFECTIVENESS AND COST EFFICIENCY

Method: individual interviews, workshops, participation to LINSAs' meetings

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 RAD benefits from very few supports from the AKS, mainly financial:

- Regions and ministries of agriculture and environment provide money in the framework of regional or national projects.
- European Union provides some financial support in the framework of European projects.

The selling of deliverables produced by the RAD enables to earn some money. Also members subscriptions brings some money.

The RAD is based on the work and experiments of each farmers involved in the network. This work can be considered as voluntary.

The RAD expresses different needs of support:

- Technical support:
 - Historically, the RAD has been working on the development of grazing. This point remains one important one for the local groups. Some technical points remain really important in the process of learning for farmers: soil, animal food for instance. With the difficult economical context, the study of production costs is taken more and more importance in the needs of farmers, even if the reduction of costs has

- been one of the key-point of the RAD since its beginning. Technicians have to develop ways of dealing with this subject.
- Needs of “new” approaches on animal health (for example the use of observation, like Obsalim method), on biodiversity, or on the development of pasture have also been expressed by the farmers. Some groups already work on these subjects.
 - Financial support: the financial resources of the RAD are not permanent, which causes some difficulties in planning projects. Most technicians stay a couple of years before leaving the network because the incomes are low.
 - Political support: the RAD works hardly to defend at the national and international levels (CAP) the concept of supplies dependent on economical and social aspects and grass production. All attempts have been disappointing for the network because even if their ideas are heard there are still no concrete facts (specific supplies). Moreover, they consider unfair to see that people using non respectful practices (too many pesticides for instance) receive help for decreasing their use, whereas the RAD who already promotes practices respectful does not receive any supplies for the very same reason: they already work well enough and therefore do not need supplies.
 - Recognition of the status of “farmer researcher”: the RAD’s farmers are used to test and experiment new and alternative techniques on their farm, without receiving any financial supplies. Consequently they take risks which are not covered by insurance or other tools. A feeling of injustice can appear when their successful techniques are applied by a larger amount of farmers (ideas conveyed then by advisory services of the traditional AKS). But most of the members prefer seeing their techniques being applied (because it is better for the environment and for the social work of farmers) even if the recognition does not exist.

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

- *To what extent do the different types of support help the LINSAs to achieve its goals? (or achieve innovation and learning?)*
- *What are the benefits of the different types of support- in terms of **outcome** and **outputs** and how have these been measured?*
- *Who are the beneficiaries of different types of support? Individuals, a small group, a community, wider society?*

- *How long/how often has it taken to achieve any benefits from the different types of support? (Intensity of support)*
- *What would have happened without the different types of support?*
- *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?*

As the RAD benefits from very few supports (mainly financial) from the AKS, all of them are important because they enable the economic survival of the RAD. The money is used to ensure the general coordination of the network, and to look for other financial supports. In that sense, all members are beneficiaries from the supports, but they don't receive directly the money.

Goals of the network can be achieved thanks to the involvement of farmers and advisors who share their time and experiments for developing new techniques more respectful for the environment.

There are no specific assessment of the effectiveness and cost efficiency of projects. Benefits from national project are difficult to evaluate: the research work is interesting but does not always answer to the specific needs of the RAD. Consequently, the time spent in these projects can be too important: the qualitative assessment shows that the question of getting involved or not in these projects is relevant.

Cost efficiency

- *Is the level of support commensurate with the benefits derived? In your opinion or in the opinion of the LINSAs members?*
- *Is the support beneficial for some groups (LINSAs members only) but not for others (e.g. society)?*
- *Has there been any attempt to evaluate the cost efficiency of the support? How? What outcome?*
- *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?*

Thanks to the voluntary work of the farmers, the RAD can be considered as rather cost efficient: they produce references, new learning approaches, new techniques etc. with very few supports.

The work is shared within the group and the RAD if it is judged useful and relevant. Some ideas and techniques developed by the RAD can also be used within the traditional AKS, in that sense every farmer can be a potential beneficiary of the supplies. At a larger scale, the environment, by extension the society, are beneficiaries as well, as practices conveyed by the RAD promote economic and ecological farming systems.

The RAD needs to spend lots of time finding new financial supports, as none of them are permanent. Time spent for that mission is not clearly identified or evaluated.

Key-points :

- Very few supports from the AKS, all financial
- Involvement of farmers and advisors
- Financial support is today a real problem
- Needs of recognition of the work done
- An efficient network: it provides knowledge and references with few supports
- Time and financial aspects should be evaluated to establish priorities

Project Number: 266306
FP7 – KBBE – 2010 – 4