

A social learning perspective on the practice, rationale and condition of agricultural extension in Denmark with a rural development focus

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Abstract: This paper considers agricultural extension as a promising mechanism for social learning and sustainable rural development, in the Danish context. Three case studies, comprising a group of rural development extension agents, and two extension agencies, were performed in Danish context. The case studies brought insights about the practice, rationale and conditions of agricultural extension in Denmark with a rural development focus. These insights were then reflected upon from the theoretical perspective of social learning. All social learning, as a necessary first step, requires some kind of collaboration between multiple actors. We found that rural development projects that involve collaboration between multiple actors were not prevalent in the three extension cases studied here. Rather, those rural development projects directed towards individual farmers are. Sustainable development is often the ultimate rationale for social learning, but other rationale for social learning often precedes this rationale. We compared these underlying social learning principles to the rationale for rural development stated in the three extension cases, and found that only the group of rural development agents had rationales for rural development that for the most part matched with the social learning principles. The paper concludes that the Danish agricultural extension system only sporadically steps into character as a promising mechanism for social learning and sustainable rural development. Yet, when it happens, this can almost exclusively be credited to the single visionary extension agent who finds 'room to manoeuvre' among the many impeding structures. The constraining conditions indicate that a massive change at organizational level is needed.

Keywords: extension, rural development, social learning.

Introduction

There is significant public and scientific interest in Europe in defining a new role for agriculture that goes beyond its core activities of producing food and fiber. The consent seems to be that agriculture should contribute to the creation of sustainable rural livelihoods. The agricultural policy of the EU has thus engaged in the concept of multifunctional farms and established the 'second' pillar of the Common Agricultural Policy (CAP). Funds are moved from the first pillar, directed towards traditional agricultural production, to this second 'rural development' pillar (Lowe et al., 2002; Durand & Van Huylenbroeck, 2003).

When agriculture is challenged to renew itself in this way, the agricultural extension organizations which are supposed to support farmers in dealing with such questions have to change too. Thus, the Danish rural development program has gained attention in Danish extension and its associated agricultural organizations. A number of extension agencies have employed staff to undertake rural development tasks. These extension agents, approximately 30 in number across Denmark, comprise multiple professional descriptions and only a few of them work with rural development full time, while most of them perform largely traditional extension responsibilities. But how ready is agricultural extension to meet the challenge of linking agricultural development to the construction of rural communities? While in the past, agricultural extension, and much of the scientific thinking about extension, has focused on supporting the individual farmer's decision-making and management, and on disseminating pre-defined innovations on single farms, it has not focused on rural development. Implicitly or explicitly, focus was on to promoting progress in primarily one direction, towards high input, high output, high-tech farming, and economic development. As Leeuwis (2004) put forward, the new challenge requires a much greater emphasis on collective processes taking place between farmers and other rural actors. Issues like the use and management of common natural resources in a

rural area, and the development of new local businesses through the integration of farming with other enterprises; farmers' collective product supply, processing and marketing for example, typically have a dimension that requires collaboration between several actors.

Social learning is used by many authors as a term to cover the new type of collaboration that is needed for sustainable development. In philosophical terms it can be traced back to Habermas' notion of communicative action, as distinguished from the two classical strategies to social change, namely instrumental rationality and a belief in technology and expert-knowledge, or strategic rationality and the belief in open competition and market forces as the way forward. The latter two types of rationality, we believe have dominated extension practice up to now. Communicative action is when rural actors reach agreement on a shared characterization of some situation as basis for co-coordinating their future activities. It differentiates itself from instrumental and strategic action in the sense that the collaborative or coordinated actions do not arise from self-centered goal orientated calculations by egocentric actors focusing on optimizing own projects and struggling to exert individual agency for short term gain. Rather, it arises from a communicative process between many actors aimed at long-term optimality or sustainability. The normative departure taken in this paper is therefore that sustainable rural development is a question of social learning in which agriculture and extension have a key role.

The purpose of this paper is to bring insights about the current status of agricultural extension as a promising mechanism for social learning, and thus sustainable rural development, in the Danish context. The following research questions are attended to: 1) What is the rural development practice of agricultural extension and how does this match up with social learning practice? 2) What is the rationale for taking on rural development in Danish extension, and how does this match up with a social learning rationale? 3) What conditions may establish the current rural development practice and rationale of Danish agricultural extension? For this purpose three case studies were performed in the Danish extension system. They are described as part of the methodological description that follows next.

Methodology

The empirical base of this paper was taken out of a larger action research study with Danish Extension. The first part of this study took place from end of March, 2006 to the end of February, 2007. In this period action research was conducted with an ERFA group consisting of ten rural development extension agents (RDEAs) from different Danish Extension agencies. The term 'ERFA group' is concept used in Danish context to describe thematic groups that meet on a regular basis in order to exchange experiences. The term ERFA is short for the Danish word 'erfaring', which means 'experience'. Central to this work stood a one-day facilitated workshop aimed at enhancing the perception the RDEAs had of their present situation and at exploring the future wanted situation they would desire as RDEAs. As preparation for this workshop, semi-structured interviews with seven of the ten RDEAs were conducted. Following the four categories of Flood (1999) for making sense of organizational life, focus was on the rural development practice performed by the single RDEA's - i.e. their description of what they have actually done (systems of practice), conditions supporting and impeding this practice (systems of structure), values (systems of meaning) and ethics (systems of knowledge power) concerning rural development. Interviews were recorded electronically, and immediately after the interview, a very detailed, but not absolute, transcription of the recording was made. Transcripts were used for synthesis and analysis in the process of constructing a 'rich picture' in the Checkland (1981) sense of the term. Different pictures were drawn, representing the different parts of the system, which as a whole depicted the complexity of the situation. At the actual workshop, only four of the ten ERFA group members participated. The workshop consisted of the following phases: 1) Presentation and discussion of the rich picture; 2) identification of themes for desirable improvement, and ranking of these themes according to perceived importance; 3) utopian drafts of the future, developed by participants.

The second part of this study took place from the end of October, 2007 to the beginning of December, 2007. In this period action research was conducted at two different Danish extension agencies (EXAG1 and EXAG2) with a half-day workshop facilitated at each agency as the central piece of the work. As preparation for these workshops, semi-structured interviews with three people associated with EXAG1 were conducted: with the chairman of one of the farmers associations owning EXAG1, the director and a board member. Six people associated EXAG2 were also interviewed: two chairmen of the associations owning EXAG2, the director, the chief of the economics advisory division, the chief

of the plants advisory division, and two regular members of the owner associations. Once more, the four categories of Flood (1999) were used as overall guiding framework for structuring questions. Data processing was handled exactly the same manner as in the first part of the study to construct a 'rich picture'. Seven members belonging to the agency's focus group for rural development participated in the workshop at EXAG1, while at EXAG2 the participants comprised of the chairman of one of the associations owning EXAG2, the chiefs of the economics and the plants advisory divisions, and three extension agents interested in rural development. Both workshops consisted of the following phases: 1) Presentation and discussion of the 'rich picture'; 2) identification of themes for desirable improvement, and ranking of these themes according to priority. At EXAG1, the workshop was followed by a meeting in the afternoon aimed at making a strategy for the agency's activities in rural development for the forthcoming year.

Besides interview transcripts, records were made in the form of minutes produced after each workshop. These minutes were sent to all participants shortly after the activity. Various writings on flip chart paper done by either the participants or by the facilitator during workshops also made up records, as do photographs and an intense e-mail correspondence with some participants.

The three case studies brought insights about the practice, rationale and conditions of agricultural extension in Denmark with a rural development focus. In order to critique status quo in extension as a significant mechanism for social learning, this practice and the rationale were then reflected upon from a conceptual perspective on social learning practice and the rationale for social learning. What follows in the next section is a description of this conceptual perspective of social learning.

Social learning rationale and practice

As described previously, social learning has been used by many authors as a term to cover the new type of collaboration and communicative rationality that is needed for sustainable development. Most authors have sustainable development as the ultimate rationale for social learning, with other rationale for social learning preceding this rationale. This is to be understood in such a way that social learning may lead to sustainable development, but it does so because it empowers people, or because it makes people more responsible citizens, or simply because of the more collective understanding that is often achievable in the process. In the following, the different underlying rationale detected in the literature on social learning is presented. For the purpose of this paper, it is not relevant to describe the different learning practices often underlying these rationale. What is relevant in this context, in terms of social learning practice, is to establish that all social learning, as a necessary first step, requires some kind of collaboration between rural actors, between farmers, farmers and other rural people, or just between rural people.

Diverse knowledge, collective understanding and action

We start with a rationale for social learning that is frequently brought forward in rural resource management literature. The rationale is that since we cannot really forecast effects, it is no longer possible, nor desirable, to rely only on scientific knowledge for management and policy development. Resource issues are characterized by complexity, uncertainty, interdependence and controversy, and they are therefore much better tackled when taking into account the information and perspective of different actors, often representative stakeholders. Dryzek (1997) for example, describes social learning as knowledge creation, where mutual pragmatic dialogue and exchange of perspectives between for example citizens, institutions and scientists lead to new and collective understanding regarding resources and potential changes, often more sustainable changes. Somewhat in parallel, Webler et al. (1995) argue that the competence of the final decision is higher when local knowledge is included and when expert knowledge is publicly examined, while Röling & Wagemakers (1998) put forward social learning as a mechanism for improved quality and wisdom in decisions making when faced with complexity, uncertainty, conflict and paradox. Similar arguments are found in Schusler et al., (2003); Ison et al., (2007); and Pahl-Wostl et al., (2007). The rationale brought forward here is that social learning contributes to sustainable development in the sense that it leads to a more diverse knowledge about a situation, topic or resource, a more collective understanding of it, and for that reason, more collective decision making and action, although the collective action part is not emphasized by all authors.

Adaptive capacity and learning systems

Another rationale for social learning also derives from the recognition of uncertainty. Factors such as the dynamics of socio-economic development, climate change, and globalization are increasing the amount of uncertainty among farmers, and in the rural area in general. This requires a more adaptive and flexible organization preferable in the context of application to allow for faster and continuous assessment and performance of the consequences of new insights. Following Folke et al., (2003) social learning may lead to enhanced adaptive capacity in rural areas, meaning that the rural actors learn how to sustain their social ecological system in a world of continuous change. Bawden (1994), following Checkland (1981), put forward the notion of learning systems as self-referential systems capable of learning about their own learning towards better futures. Because of uncertainty and since rural areas can never be designed to be ultimately sustainable from the 'outside', the use of the sustainability concept ought to be a focus of concern about their futures by rural stakeholders themselves. The challenge is to create learning systems that are continually learning how to persist, achieve long-term mobilization and stability through joint learning and learning to learn. Seen in this way, social learning can become a new institutional and social framework within which rural areas continuously develop and act towards a more sustainable future in their rural area.

Legitimacy, fairness and empowerment

A third rationale for social learning is what one could call the legitimacy or fairness argument. Webler et al., (1995) for example state that in addition to offering more competent decision making, one other important rationale for social learning is that the legitimacy of the final outcome is higher when potentially affected people can state their own cases and have a chance to influence the outcome. Renn et al., (1995) argue for principles of equity and social fairness that demand that the voices of the less powerful should also be heard. None of these authors mention the relationship to sustainability. Nielsen & Nielsen (2007), however clearly establish the link when they argue that when citizens in general are dis-empowered they remain fundamentally passive in relation to their rural area as a 'common' concern. The two sets of authors therefore argue for empowerment of citizens as pre-requisite for sustainable development, however stressing the point that for this to be accomplished social learning practice, among other things, need to have people's everyday concerns as its focal point, and trespass the existing management logic, which still determines social learning practice in many participatory natural resource management cases. The rationale brought forward here is that social learning contributes to sustainable development in the sense that when it empowers people in relation to their everyday concern, their relationship to their rural area as a 'common' concern is activated.

Responsible citizens, reaffirming democracy and sociality

Linked to the empowerment rationale is a fourth rationale for social learning which implies that social learning makes people mature into responsible citizens, and in this way, at a societal level, reaffirms democracy. Webler et al., (1995) put forward this as the most important aspect of social learning. It copes with the tendency for people to want to pursue egoistic aims before collective ones and in this way positively contribute to the democratic qualities of our society. Wildermeersch (1999) puts forward responsibility and sociality as two of four key issues integrated in the social learning concept, the others being problem-solving and learning. Since problem-solving and learning do not come about in a vacuum, they relate to responsibility, a concept which Wildermeersch defines in terms of 'emancipatory politics' in combination with 'life politics'. The combination of the two enables rural actors to consider self-actualization in the context of global independence, and thus sociality. As an illustrative example, Wildermeersch (1999) describes, how interaction between farmers and environmentalists demonstrates conflict between emancipatory politics, aimed at improving the farmers' livelihood and life politics, raising questions about innovations in farming and sustainability. It is clear that sociality and responsibility in Wildermeersch's work are not restricted to 'societal' responsibility, but including also the social responsibility an actor can have as a participant in a more local system, and the individual responsibility for own actions and life. Nielsen & Nielsen (2007), drawing on critical theory, put forward very similar ideas. The two authors stress the importance of the word 'social' in social learning in the meaning of 'being social'. Taking a societal perspective, it is the foundation for making citizens responsible. From the perspective of the individual, it is the foundation

for diverse development of capacity and relations. In short, social learning leads to “a sense of the common” in the personal way of life.

Emancipation

Linked to empowerment is also the rationale that social learning may lead to the emancipation of citizens. Emancipation has already been mentioned in the Wildermeersch sense of the word, but elaboration is needed. Nielsen & Nielsen (2007) describe the emancipatory aspect of social learning. According to the two authors social learning practice should always be directed at common life-aspects, for example in a rural area, and at individual education. Emancipation has to do with both. At a life-aspect level, because the actors then establish a liberated distance, both cognitive and performance wise, to the social and cultural constellations that shapes and re-shapes their lives discursively. In other words, people’s potential room to manoeuvre is expanded in relation to these constellations. At an individual dimension, emancipation is established because the inner room available to manoeuvre is likewise expanded. The rationale brought forward here is that social learning contributes to sustainable development in the sense that it leads to emancipation, because otherwise the dominant constellations in society advance one-sided development in the direction of instrumental and strategic action.

Rural development practice in extension

Having established social learning rationale and practice, we turn to the insights that the three case studies brought up about the practice and rationale of agricultural extension, and see how they match with conceptual perspective on social learning. This first section with findings is about practice. From a social learning perspective, we are interested in what, and to what extent, collaborative rural development practice, seem to exist in the three case studies, and how the performance of the extensionists support collaborative activities. Table 1 shows the activities and situations that RDEA’s and people from EXAG1 and EXAG2 described as previous or existing rural development projects, which actor(s) were engaged in these and what the performance of extensionists in the activities and situations were.

It is evident from Table 1 that some of the activities and situations described as rural development projects do involve different actors, and some of these also involve actual collaboration. Among actual collaborative rural development activities that involve both farmers and different other rural actors, the formation of grazing associations in nature areas is most important. Some of these involve collaboration with a local butchery, or the establishment of a local butchery for beef processing, and the possibility of marketing the beef as a local specialty. Others involve collaboration with different NGOs and local municipality, for example about the establishment of walking trails and other leisure activities in the nature area. The performance by the extension agency here is often as an initiator, and later as coordinator or actual facilitator, while at the same time bringing in know-how about the theme and funding possibilities. This performance is crucial for supporting collaboration. A similar situation exists with the more food related projects where farmers and other actors collaborate, however there were only very few examples of such projects in the case studies. The local or regional food product conferences that some agencies initiate and coordinate may bring together different actors at local or regional level to support this type of collaboration. These possibilities also exist in networks in which extension personnel have membership. Collaborative activities involving only rural actors are scarce. Yet, one of the RDEAs in the ERFA group had acted as both initiator and facilitator of a local multi-network in a small village. The process kick started actual adaptive capacity or the creation of a learning system.

On the other hand, collaborative activities are not the prevailing rural development activities and situations in the extension agencies. As Table 1 suggests, it is rather those directed towards individual farmers that are. A prime activity here is the construction of nature plans and nature conservation projects on farms. Equally dominant is the establishment of environmentally friendly technology or new technology on farms. Certainly, this is not social learning, but does it amount to rural development? As we shall see in following section, a few RDEAs in the ERFA group stated that they did not see such activities on individual farms as ‘real’ rural development. They emphasized that nature projects and environmentally friendly technology is only rural development if there is interplay or collaboration with other people or other rural aspects.

Table 1. The activities and situations that RDEA's and people from EXAG1 and EXAG2 described as previous or existing rural development projects, actor(s) engaged (+/- collaboration), and the performance of the extensionist in the activities and situations (not all types of performance in all activities and situations).

Actor (s)	Rural development activities & situations	Performance by extensionists
<i>Individual farmer</i>	<ul style="list-style-type: none"> - Nature-plans; nature conservation projects; nature-play ground in combination with walking trail and course facilities on farm. - Environmentally friendly technology; new technology. - Farm shops; farm butchery. - Aesthetic farm buildings; old farm buildings for new purposes. - Innovation on farms in general.. 	<ul style="list-style-type: none"> Initiator Strategic coach Fundraiser
<i>Individual rural actor</i>	<ul style="list-style-type: none"> - Local brewery. 	Know-how - rural development themes & program
<i>Farmers</i>	<ul style="list-style-type: none"> - Medicinal herbs for animal husbandry. 	Regulative formulae
<i>Farmers & rural actors</i>	<ul style="list-style-type: none"> - Various grazing associations. Mainly beef production with or without associated elements like organic, butchery, walking trails. - Food and recreation in catchments; local gourmet food products. - Regional & local breweries. - Local horse-riding trails. Local walking trails. - Cooperation between farms and other enterprises concerning new technology. 	Reporting results
<i>Rural actors</i>	<ul style="list-style-type: none"> - Local organic association in village. - Local Multi-network in village. 	Facilitator
<i>Conference people</i>	<ul style="list-style-type: none"> - Local or regional rural development conferences. - Local or regional food product conferences. 	Project leader
<i>Networks</i>	<ul style="list-style-type: none"> - Rural network for women. - Local Action Groups (LAG). - Municipal networks about local rural development politics. 	Coordinator
<i>Extension agency</i>	<ul style="list-style-type: none"> - Research projects: Know your landscape - holistic location analysis on farms; sensor-based fertilization systems; field borders for environmental purposes. 	Network member
		Researcher

Extension rationale for rural development

In Table 2, the rationale for rural development stated by extension people in the three case studies are compared with the rationale for social learning described in the theoretical section of this paper. We have merged the rationale stated by EXAG1 and EXAG2 because they are comparable. Yet they differ significantly from the rationale stated by about half of the RDEAs in the ERFA group.

In all case studies, the viewpoint that rural development is an opportunity to reconnect agriculture and society was brought forward. For EXAG1 and EXAG2, clearly the rationale for this was to lift agriculture out of its "poor image" and "crisis" with society, consumers and its local environment, in order that agricultural production regains acceptance in the eyes of society. Interplay and dialogue between farmers, and their neighbors is necessary to diversify the knowledge that the two have of the situation of the other and arrive at collective understanding. Actual collaboration or collective action was hardly mentioned by the two agencies, with the exception of the people who favored the development of an alternative agriculture and food system to complement the prevailing high input, high output, and high-tech model and sustain small-scale farming. For this, they saw collaboration and collective action as necessary.

The ERFA group also perceived rural development as an opportunity for a diversified view of agriculture, and a few of the RDEAs emphasized that the opportunity exists not only in relation to society, but also inside the Danish agricultural organization, including extension agencies. Much more than the two extension agencies, the ERFA group saw rural development as an opportunity to guide

agriculture in a more sustainable direction. Following lines of argumentation similar to those authors that put emphasis on the diverse knowledge, collective understanding rationale for social learning, the RDEA thought that this would happen through the interaction among people with whom agriculture is traditionally in conflict. For the same reason, some RDEAs stressed that nature projects and environmentally friendly technology on single farms in fact constitute 'real' rural development, and for this interplay, dialogue or collaboration with other rural actors with different rural aspects was needed.

Another reason was that they thought that rural development projects should have value beyond the single person, for the whole rural community; there should be synergy for many people. Sustainability, synergy, and that the whole community should benefit from projects (Table 2) links up with the rationale for social learning comprising responsible citizens, reaffirming democracy and sociality. To some, this was the most important rationale for rural development. Empowerment was also brought forward, partly in the adaptive capacity and learning systems sense of the term social learning – i.e. rural actors learning to manage on their own, and partly in the legitimacy, fairness, and empowerment sense of it. Emancipation was never mentioned as a rationale for rural development.

Table 2. The rationale for rural development (RD) stated by extension people in the three case studies compared with the rationale for social learning stated in the literature.

<i>Rationale for social learning</i>	<i>Rationale for RD stated by a group of rural development extension agents (RDEAs in ERFA group)</i>	<i>Rationale for RD stated by two extension agencies (EXAG1; EXAG2)</i>
<i>Diverse knowledge, collective understanding and action</i>	Bring together usually conflicting perspectives. Mutual understanding. Diversified view on agriculture, externally and internally in organization. Reconnect agriculture and society. Nature projects and environmentally friendly technology if interplay with other people and/or rural aspects. Ideas connected to other people.	Interplay, dialogue, cooperation between farmers and other local people, and between farmers. Improving the image of agriculture.
<i>Adaptive capacity and learning systems</i>	Rural actors learn to manage on their own.	None
<i>Legitimacy, fairness and empowerment</i>	Bring into play capital. When people are seen. Change in people. Ideas from the local, bottom-up.	None
<i>Responsible citizens, reaffirming democracy and sociality</i>	Balance between exploitation and protection of resources. Projects which are environmentally responsible, economically viable and socially just. Beneficial for the whole community. Synergy for many people. Value beyond the single person.	None
<i>Emancipation</i>	None	None
<i>Topic related desirable outcomes</i>	Securing population and rural livelihood. Business development. Environmentally friendly technology & reduced environmental risk. Alternative agriculture and food system. Attractive landscapes and buildings. Dependent on the situation.	

Constraining conditions

From the two previous sections, it should be clear that although collaborative rural development practice do exist in the three case studies, they are scarce. However, the performance of the extensionists is crucial for supporting collaboration, It is also clear that the rationale for rural development stated by the two extension agencies, EXAG 1 and EXAG 2, barely correspond to the rationale for social learning found in the literature, while the ERFA group, as a group, expressed a rural development rationale that matches social learning. In this section we put forward conditions that may constrain social learning in the rural development work that these extension agents perform. The findings are produced from the constraining conditions as regards rural development brought forward by participants in the three case studies.

Traditionally thinking agricultural organization

One constraining condition may be found in the way the extension agencies are organized. The organization of the extension agency in Denmark is such that each agency is owned by one or more farmers associations. Only farmers can be members, but the extension agency may have clients that are not members. The extension agency is frequently called 'the enterprise' as opposed to 'the association' that owns it. The enterprise, as in the case of EXAG 1 and 2, is most often economically self-sufficient, meaning that it receives no support from either association or state. Yet it is the board of the extension agency which is the strategic decision making body, and this board consists mainly of the farmers elected as chairmen of the owner associations, plus one or more staff representatives. The day to day management of the agencies, bringing strategic decisions into action, is performed by a management group led by the director. This way of organization has the advantage that the extension agency thus becomes extremely client-oriented and this ensures that the needs of the clients, the farmers, are taken care of. A further advantage is that the agency does not operate to make money per se, but to achieve a good advisory service, primarily for the farmers who own the agency. The disadvantage is if the board is constricted in its view points about who the clients are and what is interesting to focus on, or if they think too much about their own situation as farmers, more than on their function as board members in an enterprise. Such limitation in view points may be reinforced when the constellation of the board in the extension agency is quite one-sided, with the majority being farmers and male, not exactly a forum for a diversity of view points to be expressed. Not surprisingly then, as put forward by a number of RDEAs in the ERFA group case, traditional agricultural thinking prevails, and the organization is not in touch with current societal needs and the sustainability agenda that dominates discourses here. 'Fuzzy' collaborative projects may have a hard time getting the necessary back-up.

Linked to this constraining condition is a second one which was brought forward in all case studies. Apparently, one difficulty in the establishment of collaborative projects is that other rural actors see the extension agency as an agriculturally biased organization. The question of opening up the organization to allowing other actors than farmers was raised during interviews and workshops. However, especially in EXAG 1, there seems to be a long way to go before this happens. The prevailing attitude here was that extension is about primary agricultural production, about the production of food and nothing else. Thus, the rural actors may be quite right when they judge the agricultural extension as an agriculturally biased organization.

Not economically feasible for organization?

In Denmark, approximately 30 extension agents in total, have functions related to rural development. Only 3-4 of these agents work with rural development full time, while most of them perform largely traditional extension responsibilities. EXAG1 is one of the few agencies that have a person employed full time as RDEA among some 300 extension agents that perform traditional extension services. EXAG1 is also one of the few Danish agencies that have a solid rural development strategy and economic investment in the area. Economic investment seems to be important if extension service is serious about its rural development practice. One central constraining condition for collaborative projects seems to be that such projects are seldom funded, especially in the initiating phase of such projects. For example, one RDEA in the ERFA group took initiative to a collaborative project involving the establishment of a grazing association with associated elements like organic beef production, local butchery, collective marketing and walking trails in the area. She spent several months working on conceptualizing the idea in collaboration with farmers, rural actors, municipal authorities and other extension agents, before a funding application could be sent. The payment for the work performed by this RDEA was an investment made by the extension agency, which believed that in some way or the other this investment would bring payback, either in the form of new market areas, or increased activity for the existing market areas.

However, most extension agencies are not willing or able to make investments in the rural development area in this way. EXAG2 is one example. The consequence, it seems, is that they perform mainly the kind of rural development projects directed towards individual farmers. In this way, the agency can maintain their traditional way of getting payment for their work, namely through invoicing where a certain sum is paid per hour of work. The difficulty in collaborative work, and also in more project orientated work, is that there is seldom someone to send an invoice to. Also the RDEAs who have investments to back up their rural development work, find this invoice-culture that prevails in the extension agencies, a constraining condition. Invoice percentage is the only way in which

performance in agricultural extension agencies is measured. Thus, if an RDEA has a low invoice-percentage, it looks like their performance has been low. According to the RDEAs, this de-motivates them to engage in larger collaborative projects. It is easier to just write funding applications for individual farmers or less complex projects where funds are more easily available. Apparently the Danish rural development program offers very little funding for larger cross-cutting projects. Alternative ways of measuring performance could be a solution here. Transparency, as to what benefits collaborative projects bring to the organization, is weak. And there has to be economic benefit also. Neither EXAG1 nor EXAG2 wishes to perform activities that are not viable in the long run. EXAG2 does not believe rural development ever will be, and they hardly invest in the area.

Conclusion

All social learning, as a necessary first step, requires some kind of collaboration between rural actors, between farmers, farmers and other rural people, or just between rural people. Rural development projects that involve collaboration between such a range of multiple actors were not prevalent in the three extension cases studied here. With few exceptions, those that do, most often have the establishment of a grazing association in nature areas, and associated business or leisure activities, as a focus for the collaboration. The majority of the rural development projects in extension are directed towards individual farmers. A prime activity here is the construction of nature plans and nature conservation projects on farms. Equally important is the establishment of environmentally friendly technology or new technology on the farms.

Sustainable development is often the ultimate rationale for social learning, but other rationale for social learning often precedes this rationale. This paper identified and grouped them; 1) diverse knowledge, collective understanding and action, 2) adaptive capacity and learning systems, 3) legitimacy, fairness and empowerment, 4) responsible citizens, reaffirming democracy, sociality, and 5) emancipation, and put them side by side to the rationale for rural development stated by a group of rural development extension agents (RDEAs) and two extension agencies (EXAG1 and EXAG2). We found that all three groups emphasized the importance of rural development as an opportunity to diversify the knowledge that society, consumers and the more local environment has of agriculture and vice versa and thus, achieve a more collective understanding between the parties. Actual collective action around common issues in the rural area as a rationale was not brought forward by the two agencies. The group of rural development extension agents was quite distinct from the two agencies in the sense that their rationale for rural development was much more diverse. In fact, although the RDEAs diverged in their opinions, as a group, their rationales for rural development for the most part matched with the social learning rationale identified.

In summarizing, we can say that with regards to the rural development extension agents, the RDEAs, the status quo is so that there is inconsistency between their rationale and their practice. Although they seem to believe in the potential of collaborative projects, and thus of social learning and a more sustainable rural development, collaborative efforts are not prevalent in their practice. The reason for this may in fact be found in a number of constraining conditions, which we identified:

- The actual organization of extension agencies seem to reinforce traditional agricultural thinking and prevent the opening up for diversity in view points. 'Fuzzy' collaborative projects may have a hard time getting the necessary back-up.
- This closed-ness of the organization may have the effect that those other rural actors than farmers see the extension agency as an agriculturally biased organization. This makes collaborative projects hard to establish.
- There is only a modest level of readiness to make economic investments in the rural development area by the extension agency organizations. Only few believe that an investment in this 'fuzzy' area will bring the necessary economic payback.
- Lack of transparency, as to what benefits collaborative projects bring to the extension organization, may be part of the reason for this. Invoice percentage is the only way in which outcome in agricultural extension agencies is currently measured.

In conclusion, we can say that the Danish agricultural extension system appears only sporadically to step into character as a promising mechanism for social learning, and thus sustainable rural development. Yet, when it happens, this can almost exclusively be credited to the single visionary

extension agent who finds 'room to manoeuvre' among the many impeding structures. The constraining conditions identified indicate that a massive change at organizational level is needed to fulfill the aims of sustainable rural development.

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