Cooperation management as a distinct function in innovation processes for alternative food production and consumption – potentials and limitations

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Abstract

Cooperation is an important function in innovation processes for sustainable land management. Thus, cooperation management may determine – as one key element – the success or failure of such innovations processes. One goal of the transdisciplinary research project ginkoo is the development of a tool "cooperation management" that supports practitioners to plan and to improve their cooperation.

In this paper we develop the specificity of cooperation for sustainable land management conceptually. Against this background, we sketch a first prototype of this tool "cooperation management" that consists of three levels with a different degree of abstraction. The first level provides general questions for orientation about cooperation for sustainable land management. The second level displays key functions of cooperation in specific phases in a matrix. The third level will supply a set of instruments that supports the users in solving concrete problems of cooperation management addressing key functions of cooperation. Further, we present empirical findings of a pre-test of the prototype with practitioners in two case studies.

1. Introduction

Market oriented specialisation, division of labour and economies of scale in the food production system have led to enormous increases in efficiency – and often to unintended environmental and social side-effects that are not sustainable. We think, however, that there are many excellent ideas for sustainable land management but they do not succeed under the dominant conditions such as food markets, regulations, subsidies and consumer preferences. Hence, alternative forms of land management and niche innovations do not evolve automatically to replace the incumbent agri-food regime (Grin et al. 2010).

The transdisciplinary research project ginkoo¹ addresses this problem by adopting an innovation research perspective. It asks how the management of sustainability innovation processes can be better organised by coordinating actors, such as network managers, regional managers etc. The research project covers mainly socio-economic aspects that are relevant for the success of such innovation processes for sustainable land management but are often lacking due to a technology

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driven approach. Therefore, the ginkoo-project strives for a management model of innovation processes which fosters systemic innovations (institutional, organisational, social innovations) and holistic systems solutions for sustainable land management.

The ginkoo-project chose a transdisciplinary research design in order to contextualise the research in a real world setting. We collaborate intensely with two organisations which develop innovations for sustainable land management. These project partners are the organic farmers' association "Naturland Marktgesellschaft" (trading branch of the organic farmers' association Naturland) and the Biosphere Reserve Spreewald. In the first case, small scale organic farmers seek to establish ethical organic poultry production. Partners cooperate along the value added chain trying to improve their technical knowledge and their joint economic performance. In the second case, the Biosphere Reserve Spreewald in the South-East of Berlin strives for alternative forms of land use and a value creation concept for marginal wetlands through regional cooperation in order to conserve valuable, typical cultural landscapes.

One crucial element in such innovation processes is cooperation.² Our goal is to develop, test and improve a tool "cooperation management" for sustainable land management which is one element of a broader approach for the management of innovations in sustainable land management. This tool aims to support small and medium sized organisations to plan and to improve their cooperation. It enables them to balance diverse goals and requirements, to estimate costs and benefits, strengths and weaknesses of their cooperation as well as to manage it more efficiently. Possible users of this tool are change agents like pioneers of sustainable land management in enterprises or NGOs and intermediary organisations that manage interrelations between diverse actor groups and sectors along the value added chain. The paper describes the process of developing the tool "cooperation management" and presents first results such as a prototype of the tool.

The paper has the following structure: First, we explain our approach and methods (section 2). In section 3 we present hypothesis about specific requirements of cooperation for sustainable land management that were derived from a literature review. In section 4 we present preliminary findings; a first prototype of a tool "cooperation management" and empirical findings of a pre-test of the prototype in two case studies. Further, we discuss these first findings (section 5) and, finally, draw conclusions for further research (section 6).

2. Approach and methods

One goal of the project is the development of a tool "cooperation management" that will be implemented, tested and refined in both ginkoo cases (ethical poultry production and *mise-en-valeur* of cultural landscapes) together with the practitioners. In line with a transdisciplinary approach we develop tools and solutions for cooperation according to needs of the practitioners, implement, test them, and analyse and evaluate the results for refining and validating the tool. We follow an iterative research process where we combine a deductive with an inductive mode and reflect empirical results and practical outputs in several loops to obtain a robust tool which is transferable to other initiators of sustainable land management innovations.

Based on a literature review including various disciplines and research strands we developed a framework for analysing cooperation for sustainable land management. As a result, we formulated four hypotheses about the character of this type of cooperation. These hypotheses hint, on the

² Other important aspects are acceptance, marketing, knowledge management etc. that are addressed in further work package of the ginkoo-project.

one hand, at key challenges and characteristics for successful cooperation management for sustainable land management and are taken up in the structure of the prototype of the "cooperation management" tool. On the other hand, these hypotheses guide our empirical research about cooperation in the two cases with the ginkoo-practitioners and in further small comparative empirical case studies. Empirically we analyse the specificity of cooperation in innovation processes for sustainable land management, test tools and implement model solutions for the two case studies involved. A joint transdisciplinary situation analysis and an intense exchange with practitioners provide deep and detailed insights in both cases providing e.g. access to implicit knowledge about the specific cooperation.

In order to develop the tool "cooperation management" we proceed in the following way. We formulated hypotheses about specific requirements for cooperation for sustainable land management and corresponding challenges. These "guiding" hypotheses set the frame for a first prototype of the tool "cooperation management" for practitioners. In workshops with practitioners we tested the applicability and use of an early version of the prototype (section 4.1). These empirical results were used to refine the prototype of the tool which is presented in section 4.2. Hence, this prototype is inspired by scientific *and* practitioners' perspectives.

For the empirical research the following methods were applied: about 30 expert interviews, document analysis, workshops with practitioners and field excursions

3. Conceptual approach and hypotheses

A thorough understanding of cooperation and its specificity with regard to sustainable land management is a prerequisite for cooperation management. A literature review provided insights into strengths and limitations of cooperation.

The perspective of *business administration* is a starting point to understand cooperation of enterprises. From this perspective the main motivation for cooperation is to achieve economic benefits through an improved market position (Swoboda 2003). The underlying principle is that innovations can be introduced more efficiently on the market if each partner concentrates on its core competences. Via cooperation the enterprises get access to resources of other partners such as knowledge or market access and may accelerate innovation (Stein 2003).

Additionally, *network sociology* and *industrial sociology* point out that cooperation goes beyond a purely economic optimisation strategy of single firms. Strategic cooperation is embedded in a network that relies on social relationships, communication and mutual trust. Consequently, social capital is a crucial element of cooperation and has to be developed in order to attain economic benefits (Sydow 2010). Only a vivid social network may bring about innovation as an attribute of regional economic clusters (Porter 1998).

Institutional economics emphasises the influence of a broader institutional context for cooperation. Rules and norms are crucial for the exchange between firms and other partners (North 1992). Moreover, Ostrom points out that collective action and mutual dependency are important for designing the use of common pool resources which is linked with the natural environment through feedback loops (Ostrom 1999, 2007). This is especially relevant for cooperation for sustainable land management. More empirically oriented research of *rural sociology* on (alternative) forms of land use reveal the importance of shared values and a similar entrepreneurial culture of the enterprises and organisations. Social relations and communication embed cooperation into social practices (Brunori et al. 2010; Holloway et al. 2007; Schermer et al. 2011).

From this review we derived crucial aspects for a cooperation management that facilitates to exploit the specific synergies of working together without overburdening the partners. Based on conceptual reflections we formulated four hypotheses on cooperation for sustainable land management:

a) Cooperation is a prerequisite for the provision of social, ecological and economic goods and services for sustainable land management.

Sustainable land management requires cooperation of heterogeneous actors along the value added chain, in regional settings and with actors from civil society, thus, bringing together knowledge, expertise, resources and valuations from diverse perspectives in order to create sustainability qualities and avoid unintended negative effects. This form of cooperation for systemic innovation results in products and services for the market or public goods like ecosystem services which provide specific sustainability qualities. Coupling market goods and public goods as well as market actors and civil society is a main characteristic of innovations for sustainable land management.

 Cooperation may stabilise the market position of sustainability actors respectively the funding of the provision of sustainability qualities.

Innovations of sustainable land use management so far have disadvantages on the market compared to their conventional competitors since they externalise negative social and ecological effects to a lower extent. The project assumes that this structural disadvantage can be compensated at least partly by cooperation. According to literature the exchange in corporate innovation networks is understood as "complementary cooperation" that allows to use resources of each partner more efficiently (focus on core competences), to facilitate risk sharing and to get better market access (Sydow 2010: Stein 2003). Through "additive cooperation" the partners can also benefit from economies of scale. The other possible benefit of cooperation is to find partners who appreciate the created sustainability qualities (as e.g. organic production, fair wages, animal welfare) and are willing to acknowledge them by paying higher prices or provide other forms of financial compensation. These can be realised in producer-consumer cooperation or partnerships with public or private organisations (e.g. local communities, NGOs, foundations) and mostly result in niche markets. We assume that innovations in sustainable land management only succeed on the market and are able to overcome niche markets when they manage to optimise their alternative ways of production and, at the same time, generate additional forms of financial compensation – through cooperation.

c) Cooperation management for sustainable land management is a demanding task because it has to balance the competing goals of generating sustainability qualities and of stabilising the market position.

Cooperation for sustainability innovations is confronted with a dilemma. On the one hand, building social capital (trust) and developing comprehensive solutions for sustainable land management takes time. On the other hand, cooperation is supposed to foster rapid innovation cycles for economic purposes in order to compete in a dynamic environment (Hirsch-Kreinsen 2002). As a consequence, the balance between economic optimisation and providing holistic sustainability qualities is a specific challenge for the management of this type of cooperation and requires specific competences. A tool "cooperation management" therefore has to address a complex process with diverse functions as allocating scarce resources, identifying an adequate range and number of partners and building trust between them

These hypotheses guide the conceptual develop of the tool. They emphasise the twofold function of cooperation for sustainable land management. On the one hand, it helps to integrate diverse actors along the value chain as well as different types of knowledge, interests and capabilities in order to generate specific sustainability benefits (common goods etc.) and to internalise negative effects (synergetic cooperation). On the other hand, sustainability innovations are confronted with competitive disadvantages in comparison to conventional ways of food production that externalise costs. Cooperation may compensate these disadvantages and, thus, stabilise the economic position of the partners. This might be achieved either by economies of scale (additive cooperation) or by including partners who accept higher prices or provide additional compensation. This is considered as a crucial step towards a sustainable food economy where producers and consumers share responsibilities and accept higher prices for a better sustainability performance, at least in a niche market. However, cooperation of this kind is confronted with challenges, e.g. because of the heterogeneity of the partners, the direct competition with the conventional market, and the limited resources of the actors. These challenges need to be addressed by the tool "cooperation management".

4. Results

In this section we present preliminary results with regard to cooperation management. First, we describe a prototype of the tool cooperation management (4.1). In 4.2 empirical findings about testing the prototype are presented for both case studies, thus, reflecting the deductive as well as inductive procedure.

4.1 Prototype of the tool "cooperation management" for sustainable land managementThe tool is developed in order to support users

- To consider if cooperation is useful to realise theirs ideas or not,
- To plan and initiate cooperation,
- · To analyse a specific cooperation,
- To structure and manage it systematically,
- To reflect on its usefulness and effectivity in attaining the goals, and
- To finalise the cooperation if necessary.

The tool is planned as a comprehensive approach for cooperation management in sustainable land management that covers all relevant aspects without overstraining the actors. Therefore, the tool has three different levels each becoming more detailed and specific.

Also the prototype consists of three levels that correspond with different degrees of abstraction. While the more general level provides orientation, the more detailed level gives (precise) instructions for specific actions or interventions. So the users can chose which degree of differentiation is appropriate for their purposes. Thus, the levels describe the way of how to use the tool and guide users during the implementation process which requires decisions about how to proceed with cooperation management. This implies valuations, identification of pressing problems and decisions for specific instruments. The three levels are:

- General questions for orientation about cooperation for sustainable land management,
- 2) A matrix (respectively a table) that gives an overview about crucial functions of cooperation in specific phases.
- A set of instruments that support the users in solving concrete problems of cooperation management.

Following that idea of different levels, the first level of the tool should provide an overview to users over the characteristics of planned or current forms of cooperation. However, not all of these aspects are necessary for each user and every implementation. Hence, the second level of the tool displays several key functions and elements of cooperation for sustainable land management. This helps to identify starting points for structuring and managing a specific cooperation. On a third level, the key elements of cooperation are linked with instruments that support the users in solving specific problems of cooperation management or inspire specific tasks of cooperation management. This level provides a tool kit for specific tasks.

Level 1: Guiding questions for orientation about the status of the cooperation

The following set of questions (table 1) is organised around six central functions of cooperation management which we identified via literature review and our first empirical findings. The objective of this part of the tool "cooperation management" is to provide a systematic and comprehensive orientation about the current status of (intended) cooperation.

Table 1: Questions for orientation

1) Objectives of the innovation for sustainable land management and requirements for cooperation

The questions distinguish between the objectives of the innovation for sustainable land management on the one hand and the requirements for cooperation that can be derived from that because cooperation is seen as a means to an end:

- Which qualities of sustainable land management does the *innovation* strive for? In which form, quality and degree? Which goals are excluded?
- Are there principals or a mission statement for the innovation?
- Can cooperation help to reach the aspired sustainability qualities in a better way?
- How shall provision of the sustainability qualities be financed through the market or through other forms such as public money from subsidies, taxes, fees or private money from donations, funds, sponsoring etc.? Which kind of cooperation is suitable?
- Does a (written) agreement about the goals of the cooperation exist?
- How will you evaluate the success of the cooperation?

Milestone: Objectives for the cooperation are formulated.

2) Actors and their resources

- Which actors are needed to reach the goals of the cooperation?
 - What types of organisations and actors are needed for the cooperation (enterprises, non-profit-organisations such as non-governmental-organisations, public entities, administration, associations etc.)?
 - With which resources (financial means, work force, time, land, knowledge, ideas, power, social networks, market access, reputation etc.) should they contribute to the cooperation?
 - What roles shall they play in the cooperation (pioneer, expert, networker, promoter, mediator etc.)?
- Do the involved actors (individuals and groups) represent a broad range?
- Are actors lacking? Are there too many partners?
- Are the partners motivated, do they identify with the goals of the cooperation?
- Are the organisational cultures of the involved partners compatible (e.g. hierarchical vs. cooperative, formal vs. informal)?

Milestones:

- ✓ Partners for the cooperation are identified.
- ✓ Suitable partners are integrated in the cooperation.
- ✓ The "right" number of partners is involved.

3) Distribution of costs and benefits (input and output)

The questions distinguish between the overall cooperation and the level of the individual partners such as enterprises of the value added chain.

- Does the overall cooperation provide (or contribute to) the intended sustainability qualities? Is the cooperation effective?
- Which input (time, workforce, expertise etc.) does each partner bring into the cooperation?
- What is the benefit, what is the output for each partner? Does each partner consider the cooperation as worthwhile or profitable?
- How are "prices" made for the exchange of (sustainability) qualities of each partner in the cooperation?
- Are there rules and procedures to evaluate and redistribute costs for goods and services exchanged in the cooperation? Are they considered being fair by all partners?

Milestones:

- The cooperation provides the aspired sustainability qualities.
- The partners consider prices and distribution of costs and benefits within the cooperation as being fair.
- Costs and benefits are balanced for each partner.

4) Structure of the cooperation: institutionalisation and (formal) agreement

- Are structures and tasks for the management of the cooperation clear?
- Is there a transparent distribution of responsibilities and accountability?
- Is it clear how decisions are taken in the cooperation?
- Is a network management established?
- Does a formal (legal) agreement about the cooperation exist? Or is there an informal agreement on the cooperation?
- How are the relations of power distributed within the cooperation? Is there a hierarchy?
- Do the partners consider the rules of the cooperation as fair?
- Are there rules for the exit of partners?

Milestones:

- ✓ Structure and rules for the cooperation are clear and accepted by all partners.
- ✓ A network management is established.
- ✓ A written agreement on the key points of the cooperation exists.

5) Operative steering of the cooperation and network management

The questions distinguish between the overall cooperation and the level of the individual partners such as enterprises of the value added chain.

- Is the cooperation effective?
- Does the (network) management enable efficient collaboration?
- How is the cooperation management financed?
- Is the management of the cooperation provided with a budget on its own?
- Does the network management monitor if the partners provide the (sustainability) qualities they agreed on (controlling)?
- Are moderation and conflict management established?
- Is there a regular evaluation of the goals and the performance of the cooperation?
- Do the partners consider the cooperation as efficient?

Milestones:

- ✓ The operative management of the cooperation works.✓ Financing of the cooperation management is established.
- ✓ Conflict management exists.
- ✓ The partners consider the cooperation as being efficient.

6) Communication, knowledge management and cooperation culture

How is the internal and external communication organised? How transparent is the

- communication?
- Do the partners provide their knowledge and expertise for the cooperation?
- How is the knowledge management organised? Can knowledge gaps be identified?
- How were/are lacking competences addressed (e.g. training, qualification, consultancy)?
- Do partners trust each other? Are measures implemented to improve mutual trust?
- How is the mutual perception of the partners (esteem, rivalry)?
- Is there a common moral concept? Does a team spirit exist?

Milestones:

- ✓ There is a communication concept.
- ✓ A knowledge management exists.
- ✓ The partners trust each other.

These questions sensitise users for crucial aspects and critical problems of their (intended) cooperation. Users can apply this part of the tool either by answering the questions on their own or by discussing them with colleagues and partners. This can be done in a "quick and dirty" way or in workshops. The questions implicitly refer to scientific knowledge (theories and empirical findings) but are formulated in a way that is close to the everyday experience of cooperation and, consequently, can be understood by users without previous scientific knowledge. The questions and "milestones" help users to evaluate the strengths and weaknesses of their cooperation, thus providing a comprehensive picture. These questions for orientation build a starting point when using the tool. Further, they can be discussed regularly in order to reflect about the status of the cooperation and its development.

Level 2: A matrix of central functions and phases of cooperation for in-depth analysis

The matrix combines six central functions of cooperation with four phases of cooperation that are a) initiation and planning phase, b) development phase (setting up the cooperation), c) realisation of the cooperation, d) transformation of the cooperation including respectively the end of cooperation (Koller et al. 2006; Wodja et al. 2006). Central functions are allocated to those phases of cooperation in which they play a key role (see table 1). After a quick orientation about the status of the cooperation by answering the guiding questions, the matrix provides a systemic overview over cooperation as a process. The matrix guides an in depth analysis of a specific cooperation and reveals links and interfaces between the different functions. Thus, main challenges for the cooperation can be identified and prioritised where to start improving cooperation management.

The *third level* of the prototype will be a *set of instruments* that exists only in a rudimentary form so far. In the next project phase we will search for suitable instruments and adopt or develop them for the specific requirements of practitioners from the two case studies. Step by step we will assemble a tool kit of various instruments that have different formats to facilitate cooperation management.

Table 1: Integrative matrix of phases as well as elements and functions of cooperation management for sustainable land management

	Objectives of innovation + requirements for cooperation	Actors and their resources	Distribution of costs and benefits (input and output)	Structure of the coop- eration: institutionalisa- tion and (formal) agreements	Operative steering of the cooperation and network management	Communication, knowledge manage- ment and coopera- tion culture
1. initia- tion and plan- ning phase	Clarify objectives of the innovation and need for cooperation; formulate guiding principle/mission of cooperation	Identify suitable partners and attract them for cooperation; watch out for good mixture of partners	Level of cooperation: describe costs and benefits Level of individual organisation: distribution fuzzy/ relational, but perceived as being fair	First ideas regarding structure of the cooperation	Efforts for initiating the cooperation (contacting partners, moderating discussion about objectives, initiate measures for generating trust); conflict management if necessary	Informal (internal) approaching of potential partners (high level) Measures for trust building Development of a cooperation culture
2. deve- lopment phase			Level of cooperation: Determine distribution of input and output/ costs and benefits Level of individual organisation: Describe costs and benefits, draft of distributional rules, perceived as being fair	Concept for the structure of the cooperation Distribution of tasks, decisional rules cooperation management Power relations are clear → first contractual agreements	Efforts for the development of the cooperation: accom- panying the structuration process, suggestions for managing the cooperation Conflict management if necessary	Stabilise communication transparent design, Integration on the functional and experts level Building trust and motivation Develop appropriate way of management and communication
3. realisati on phase			Level of individual orga- nisation: Determine costs and benefits Controlling of a) Qualities of the cooperation, b) Costs and benefits of the partners	Cooperation contract is signed Gradual adjustment of the structure	Design of operational procedures: provision of sustainability qualities Control compensation of efforts Moderation and conflict management Mode of financing the cooperation is established	Establish internal and external systems of communication Measures of establishing a cooperation culture Establishment of a knowledge management
4. transfor- mation phase	Check objectives and vision and adjustment	Check if there is a lack or abun- dance of part- ners	Check the distributional rules: Are they perceived as being fair? Do the partners benefit from the cooperation?	Check the cooperation structure: Is it appropriate, effective and efficient?	Evaluation of the opera- tional processes Continuous moderation and conflict management	Check communication flows Check cooperation culture Develop knowledge management further

For each function/element the most relevant phase is highlighted with grey colour.

4.2 First empirical test of the prototype in two case studies in Germany

The levels 1 and 2 of the prototype of the tool "cooperation management" were pre-tested in a first step as follows: The authors conducted a workshop with the practical project partners for each case study. The practitioners received a description of the prototype (level 1 and 2) for preparing the workshop. During the workshop researchers and practitioners discussed the questions for orientation (level 1) and analysed key elements and crucial functions of cooperation (level 2) for each case. Researchers and practitioners deliberated about strengths and weaknesses of the cooperation in the two cases, sketched elements of a preliminary strategy for cooperation management, and identified a starting point.

After the workshop the researchers formulated an analysis of the status of the cooperation for each case that serves as a baseline for further research and transdisciplinary intervention from the project. Moreover, the researchers formulated first suggestions for the practitioners how to proceed with their cooperation management.

The hypotheses allow comparing cooperation in the two cases, identifying best practice, and learning from mistakes. They guided the reflection about the transdisciplinary exchange. In the following sections the analysis of the cooperation is presented for both cases.

As a second strand the practitioners gave recommendations regarding further development of the tool prototype which will be considered in developing the tool further.

Ethical organic poultry production – "ei care"

The background of the innovation "ei care" by the organic farmers' association Naturland Marktgesellschaft are negative externalities resulting from an increase of large scale animal production entities based on economies of scale also in organic farming. Highly efficient chicken production has led to ethical societal discourses – leaving room for innovative solutions besides a value chain with monopolistic structures in the breeding of either egg laying hens or hens for meat production. The regional initiative "ei care" for an ethical organic poultry production started in 2011 and provides a holistic alternative to large-scale poultry production based on hybrid breeds. It is based on a dual purpose breed that allows for an integrated egg and meat production at small mixed farms in the Berlin-Brandenburg region. The challenge is to link limited production levels with established value chain infrastructures and routines. This includes new forms of cooperation along the value added chain as well as between farmers and consumers.

Status of the cooperation: The ei care-cooperation is in the *realisation phase*. The cooperation along the value added chain started several years ago and produces eggs and meat which is marketed by a regional organic wholesaler for regional consumption.

Whereas the objectives of the general innovation are meanwhile quite clear and explicitly formulated on the website of the ei care-project (http://www.aktion-ei-care.de), the *goals for the cooperation* of the partners are still fuzzy. Fundamental issues have to be clarified again and again because the goals are not explicit and not fixed in written form which affects the transparency of the cooperation and its management. The cooperation involves strong *actors* especially the organic farmers' association and an organic wholesaler as well as about eight rather small poultry keeping mixed farms. Still lacking are hen breeding and meat processors who are willing to deal with comparatively very small quantities as well as a stronger involvement of organic food retailers and consumers.

The distribution of costs and benefits along the value added chain is not transparent for all partners. The prices for the eggs and for the meat are negotiated orally and are strongly oriented at market prices for organic poultry. They hardly correspond with the costs of the farmers. As a consequence, several farmers do not get a satisfying compensation for their costs, time and effort. The fuzziness of the goals is reflected also in the *structure of the cooperation*. Important responsibilities, tasks and functions are not explicitly described, a written agreement for the cooperation is lacking. Further, the partners are under market pressure, pricing is dominated by the logic and channels of the food market. Some of them perceive the wholesaler as powerful within the cooperation whereas the wholesaler sees himself exposed to fierce competition within the food commerce.

An effective *network management* and operative steering of the cooperation is hampered by the fuzzy goals and structure of the cooperation which lacks especially long-term planning and setting priorities for the cooperation. The internal *communication* does not reach organic retailers who might promote the "difficult" because expensive and complex ei care-products.

Identification of critical functions of the cooperation management and first recommendations: The analysis revealed cooperation problems with regard to the goals and the structure of the cooperation as well as with the current configuration of the partners. Both main partners of the cooperation – the organic farmers' association representing also the farmers of ei care and the organic wholesaler taking care of marketing a "difficult" product – are responsible for clarifying the goals, structure and "rules" of the cooperation. A shift towards a more formal cooperation management could make the cooperation more transparent for all other partners. Thus, a formal agreement about the cooperation would be a milestone in the development of the cooperation. Further, new partners especially for a more specific marketing of the alternative ei care-products could stabilise the cooperation.

Selection of an instrument: During the pre-test workshop practitioners and researchers agreed on an instrument that facilitates to formulate a written agreement. The instrument to be developed (or adopted) will include blue prints and examples of legal cooperation agreements and suggestions how to negotiate such an agreement between partners.

New forms of site specific land use and value creation for marginal wetlands for the conservation of typical cultural landscapes – Biosphere Reserve Spreewald

The Biosphere Reserve Spreewald South-East of Berlin is confronted with a phase out of site adopted grassland management practices on marginal wetlands because traditional forms of land use are at the margin of profitability. The maintenance of the typical cultural landscape of high natural value demands new forms of land management. The innovation in the Spreewald consists of a combination of such new forms of land use such as landscape preservation funded by compensation payment schemes and the use of biomass for small scale thermal production as well as cooperation between land owners, land users, natural conservation and the tourist sector for financing the preservation of the typical cultural landscape that is demanded by tourists.

Status of the cooperation: A first empirical analysis of the cooperation focused on the establishment of a so called "environmental pool" which allows concentrating measures for natural and landscape preservation on a specific site. These measures are financed by the Regulations on Intervention under the Federal Nature Conservation Act which obliges an individual or organisation to compensate for environmentally harmful interventions. The cooperation for this environmental pool is in the *initiation and planning phase*.

The *objective* of this pool in a narrow sense is financing landscape preservation measures by funds from the Regulations on Intervention. In order to be entitled to use this money, the objectives have to be in line with the regulation. Cooperation is needed to establish this pool and to meet legal requirements. In a broader sense the cooperation strives for combining these measures with other activities for landscape preservation and to develop a comprehensive strategy for cultural landscape development in the biosphere reserve. Central *actors* for the pool are the agency responsible for the pool – in this case a citizens' foundation –, land owners, land users, the environmental administration and the management of the biosphere reserve. For a broader strategy additional actors like environmental associations and tourism are needed but they are not yet involved.

The distribution of costs and benefits is mainly organised by legal standards and full-cost pricing for the measures over 20 years. Additional measures have to be financed by other funds like sponsoring from tourism which is so far not the case. The *structure of the cooperation* is also shaped by legal regulation. Measures have to be approved by the environmental administration. Moreover, a broad strategy for developing the typical cultural landscape needs a wider and more flexible cooperation structure to be able to involve and motivate heterogeneous partners. This calls for a very active network management. Because of the early phase of the cooperation, *operative steering* of the cooperation (network management) and a *communication* concept are not yet well developed.

Identification of critical functions of the cooperation management and first recommendations: The central cooperation partners should strive for a broad strategy for developing the typical cultural landscape using the environmental pool and funds from the Regulations on Intervention as a cornerstone. The latter should not become the structure and the purpose of the broad strategy but serve as a means for this end. This implies the involvement of heterogeneous actors who all have stakes in the cultural landscape like agriculture, nature conservation or tourism. These potential partners need to be addressed from the beginning so they can develop ownership in this strategy. This requires own resources for cooperation and network management in order to motivate and bring together actors even with rival interests in cultural landscape.

Selection of an instrument: During the pre-test workshop a checklist for identifying suitable actors with adequate resources was identified as a useful instrument that will be developed for practitioner during the next week.

5. Discussion and reflection

The first test of the prototype (level 1 and 2) was considered useful from the practitioners in order to reflect their cooperation systematically. The questions for orientation (level 1) were assessed as easily applicable and could be discussed intuitively without profound previous knowledge about cooperation (theory). However, analysing the cooperation in detail using the matrix (level 2) required some knowledge about and experience with cooperation. The weighing of arguments and assessment of risks and opportunities for cooperation management was assisted by the researchers who gained deeper insights into the cooperation at question.

In both cases, trust and engagement are important assets. Challenges for cooperation are clear definition of its goals, transparent internal and external communication, fair distribution of costs and benefits between the partners as well as dealing with pressure from 'the market'.

The cases differ in the following way. The cooperation for the ethical organic poultry (ei care) is organised along the value added chain. Its products compete in the food market. Therefore they are exposed to market pressure that demands for an optimisation of the production and marketing processes. In contrast the cooperation for alternative value creation to preserve typical cultural landscape in the Biosphere Reserve Spreewald, is organised following legal requirements and administrative procedures as a prerequisite to use finances from the Regulation on Intervention. There is hardly any market pressure with regard to funding through the Regulations on Intervention. When aiming for a broad strategy for preserving cultural landscape, however, a broad range of actors has to be involved and the goals of cooperation become even fuzzier than in the first case. This requires a proactive network management.

The researchers got valuable feed back by the practitioners through the pre-test of the prototype. The formulation of the orientation questions was simplified at several points to foster a better understanding. Additionally the pre-test with the Spreewald case showed that an early check of the legal requirements and restrictions in the course of developing an innovation plays an important role.

6. Conclusion

In a next step, the prototype has to be developed further. The tool kit of specific instruments (level 3) has to be assembled step by step and tested with the practitioners.

Further research on cooperation and on the tool "cooperation management" has to deal with the following questions:

- How far can "cooperation management" be decontextualised and developed as a generic tool for sustainable land management that is characterised by site specific and context sensitive solutions?
- What is specific of cooperation for sustainable land management? What are particular challenges for this kind of cooperation management?
- Is cooperation for sustainable land management capable to compete with conventional production on the market? What does this mean for the design of cooperation? Are new framework conditions needed?

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