Management and strategic advisory by using farm-based sustainability assessment in Denmark

Exemplifying the importance of imagery and process guidance (facilitation)

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Abstract: This paper is a presentation of practitioner's experiences, observations, reflections/feedback of beneficiaries/actors and colleague professionals in the application of a farmbased tool for sustainability development. The assessments were performed by certified farm advisors using the RISE-methodology and the process was mirrored with facilitation in organisational consultancy and change processes.

It's authors' objectives were to explore and elaborate on integrating 'content' (viz. RISE) in an iterative 'process' using imagery to effectively enhance sustainability in agriculture. The presented approach is considered to increase joint analyses, mutual understanding and shared operational visions among involved actors through 'visual' communication and action learning of local farms as knowledge systems of 'communities of practice'.

Danish farm advisory uses the RISE method (Response Inducing Sustainability Assessment) and has experience with analysing more than 200 farms during the last four years.

Using RISE shows that the balance between exact farm data, relative scores related to local practice and imagery or visualisation management in the reporting, analysing and action planning phases, and a follow up process, gives possibilities to achieve successful advice.

A good start for advisory work is an all-round farm-based sustainability assessment. The assessment should be based on farm data and show results in a system context. To show results in a holistic context can be done by using visual overview which farmers' recognition and interest to react. It is often a dilemma whether to choose a quantifying tool going into details (takes more time), or a qualitative tool with the intention of giving overview. The process to gather data, discuss extra information, report to the farmer and follow up on implementation, which is inherent to the method, stimulates farmers to decide themselves which challenges they would like to tackle, this way enhancing their empowerment and efficacy.

When discussing the sustainability assessment with the farmer it is of great value to include the community of practice (CoP) in the dialogue, and the method to visualise scores and outcomes in an understandable and overviewing way is an important tool. In addition, the facilitation of the processes of information exchange and follow-up strategies would be valuable. The RISE method consists of illustrative spider webs and colour ratings which gives farmers possibility to reflect on the whole system. Some challenges in management might be indicated as pathways to improve thematic scores on e.g. soil, economy or climate. The farmer can see the farm's scores in relation to the other themes of sustainability, and chose where to invest time, energy, or money.

Keywords: Sustainability assessment, farm level, imagery, management, community of practice, process facilitation

1. Introduction

Farm advisory often is confronted with the fact that given tools or methods for management improvement or farm innovation are not followed. Advisors get frustrated, as they feel they have explained exactly what they think should be done on the farm. This can be direct

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management for practical intervention or strategical actions to be taken to change long term perspectives. Different European organisations and projects have been active to work with these advisory challenges, such as the European forum of agricultural and rural advisory systems (www.EUFRAS.eu) and a project to find best practice of agricultural information systems; AKIS and ProAkis (www.PROAKIS.eu) and more recently Agridemo (www.agridemo-h2020.eu/). Studies on lack of advisory impact often come up with several explanations. For example, in the case of how to enhance empowerment/efficacy of farmers, there is the dilemma between how to involve farmers instead of making them dependent on extension consultants. In addition, authorities, but also advisors imposing rules or improvements, fail to consider farmers' situation, which is quite unique, compared to many other enterprise owners, sometimes titled "Farmers DNA". Farmers often are a family business, which can be tracked over several generations in history; they own land, which at the same time is considered part of the country the live in, which leads to political decisions on behalf of their stewardship of the national resources. A lot of farmer's knowledge is tacit knowledge, accumulated over a large span of time. The farmers are embedded in the local development, engaged in regional activities, and often socially active in organisations. The land, which is part of their resource to produce is considered a common asset for nature, biodiversity, landscape, recreation (need for license to produce). They work often for low wages and many hours a day, 7 days a week. Farming is a way of life, where decisions must be made, influenced by the unpredictable climate, and often with short deadline. When rules or acts which limits and regulates their space to manoeuvre, are imposed, they feel wing cut, and tend to oppose. All this is often mentioned by experienced advisors as drawbacks for getting in touch or making a point, even though advisors often work for farmers' organisations.

However, farmers are dependant of consumers, also critical ones, buying their products, even if the direct contact between primary producer and consumer almost has disappeared, and retailors have taken the role for contact to their demands and wishes. Consumers also, increasingly buy, inspired by media, addressing climate change, water pollution and animal welfare. So how to manoeuvre in this field between traditions, personal motives and collective demands?

In Denmark, organic farming has been confronted with some of these demands from society. Primary production needs to convert and adapt to meet them. To anticipate the demands, the organic extension service and sector agreed to start a campaign "Your farm is organic, is it also sustainable?" As a start, the extensions services in Denmark decided they would need a tool to measure the sustainability level on a farm. This was, to show the farmer what sustainability development includes, but also having a start point for improvement. After careful consideration, the RISE method (Response Inducing Sustainability Evaluation) was chosen (Grenz et al., 2012).

The use of a holistic sustainability development approach, using imagery and visualisations resulting in an action plan has now in Denmark been used for four years, analysing farms and making action plans. Strengths of this method such as combining 'content' with 'visualisation processes' boosts empowerment, actors' involvement, increases community responsibilities and enhances organisational learning, development and change, but challenges appeared in the process and follow up.

The aim of this paper is therefor to present practitioners' observations, feedback and reflections on the use of the RISE tool under four key themes drawn from the advisory practice literature and experience: 1) using imagery in the 2) knowledge development process of 3) Community of Practice (CoP) by 4) facilitation of the advisory process. These observations and reflections could help other practitioners in using RISE and other similar tools to facilitate farmers' iterative knowledge creation, action learning and implementation in practice.

2. Methodology

In this paper, four years of sustainability assessment and development work in agricultural advisory in Denmark using the RISE tool was used to evaluate the method, discussing

essential facets and breaking points in the process. RISE analyses are performed by certified consultants whom gather data (from databases and by questionnaires), analyse them using the RISE program, and present them to the farmer. A RISE analysis will typically take 16 hours of work for the consultant. In total, there have been performed about 200 analyses of which half on dairy farms, the rest on arable, pig, poultry, and vegetable farms. The farmers in Denmark have reacted positively when asked in evaluations on the program, but have generally asked for mere follow-up and structured process of implementation. Partially because they would like to see effects of the changes initiated, partially because they lack experience in processes of change. The evaluation of the RISE method was based on practitioner's observations, reflections and feedback of beneficiaries/actors in evaluation sessions, and colleague professionals in two fields of expertise. 1) The application of the RISE-methodology in agricultural extension and 2) facilitation in organisational consultancy and change processes, improvements on the process.

3. Background

The RISE tool is data based, scientifically grounded and methodologically described in peer reviewed papers (Grenz et al., 2012; De Olde et al., 2016, Slätmo et al., 2017), and designed as a method to use in the process between advisor and farmer, which should result in actions to be implemented. The developmental/pedagogical value of the tool is anchored in a learning & developmental process, which involves data, a holistic approach, the use of imagery, and action-oriented results. These aspects will now be elaborated upon.

The RISE method's first step is to ask the farmer to imagine the farms core and draw this in the polygon (see figure 1). Without further comment, the analytical phase then starts, consisting of quantifying and qualifying farm-indicators. Afterwards, the assessment results are presented to the farmer, both as polygon and as written report. Hereafter an interactive process starts to find farmers' interests and motivations for improvement and devotion. First within the circle of advisor, farmer (family) and co-workers, and later, dependant on the advisory track chosen, broader, using actors within the production chain and social relations.

3.1 The role of imagery in methods used for advisory processes

'Imagery' has several sides (https://literarydevices.net/imagery/), first it can use a 'figurative 'language' to represent data, research objects, research actions, research outputs in such a way that it appeals to our physical senses.

Second, imagery gives a vibrant, graphic representation of reality, it appeals to the visual sense of the persons concerned. The actors start to generate automatically additional ideas, images, thoughts, and insights. Participants get involved in all sorts of consecutive, associative and creative processes called mental modelling and thinking, that in their turn produce additional mental images, figures and likenesses of such images. By this action of imagination collective, interactive processes enhance dialogues, exchanges of thoughts and while elaborating on topics/subjects the knowledge creation that takes place is of added value to the CoP concerned.

Thus, third, 'imagery' with its subsequent 'imagination processes', turns out to be more complex than just a 'picture representing scientific data'. Besides giving a holistic overview of research, an image can be shared by the involved participants. Concurrently it initiates a wide variety of additional and concurrent imagination processes. Therefor the use of images or figures has a diverse impact and can be considered a 'catalyst agent' or enabler in participatory, cooperative knowledge system development.

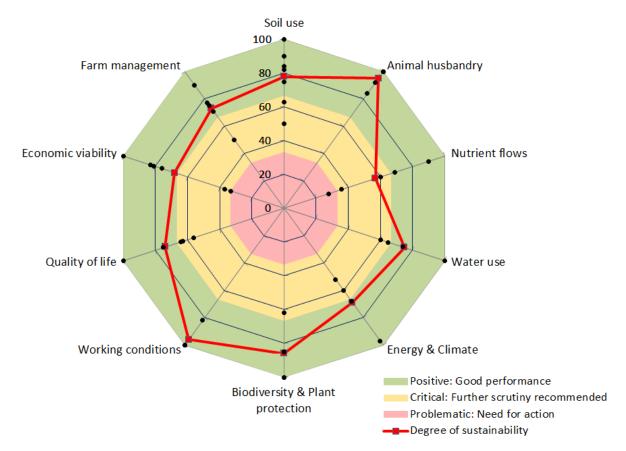


Figure 1. A RISE polygon with fictive scores for the 10 themes as part of the results of a farm assessment. Each black dot is the score of an indicator based on a computation of quantitative and qualitative data and made proportional to reference data (local or global).

In this paper 'imagery' is defined as a visual representation of collected scientific data or information, that is used by 'communities of practice' to enhance their specific knowledge development system by the action of imagination and change processes. It can function well in the objective to visualise issues in holistic context.

3.2 Community of practice

Each farm forms a specific community of practice (CoP). A CoP can be characterised by 1) a specific social constellation of actors that 2) interact, confer and communicate on specific content-related-issues-in-context (Burnes, 2005). A CoP as one whole systemic entity is built up out of three levels: the system (farm as centre core), sub-systems (individual members of the centre core) and supra-systems (bigger, indirect circles, adjacent to the centre core). The centre core farm-team comprises: farmer, co-workers, extension worker/scientist, farmer's family. Besides, there might be more indirectly, loosely and inter- connected network-circles at different levels of aggregation, e.g. information sources, scientific researchers, contractors, chain partners, (N)GO's, or social networks.

The farm as social-topical constellation comprises relationships in entwined networks of actors that execute influence as a compound mixture of interests, power, sentiments, values, drives, cultural backgrounds. In systems networks, actors are exploring and constructing reality by dialoguing (Kessels et al., 2002), whereby learning and development emerge (Decuyper et al., 2010; Argyris and Schön, 1996), new insights are obtained (Senge, 1990) and sense making takes place (Weick, 2001).

3.3 Advisory tracks should be facilitated processes

In successful iterative knowledge development processes, the following compounding and necessary elements should be taken in account. The description of the process flow represents an ideal, however not compulsory, chronological order (Van den Berge and Wortelboer, 2002). Each process step elaborates on the tangible outputs that are mutually agreed upon in the preceding step.

This approach and the process steps of this model have been further developed by an action learning process over a period of 20 years. Together with sound boarding sessions of facilitator colleagues the model/approach was further developed and finetuned. In these feedback and evaluation processes the impact on communication, knowledge development, additional value creation was consecutively explored and registered. (Wierdsma, 1999).

- 1. Analysis: including processes of observing, exchanging, reflecting and having dialogues concerning the facts. A phase of mutual rational thinking, logical cause-effect reasoning and analysing. This element results in a mutual analytic agreement.
- 2. In relation to facts and figures directly involved actors take stakes and a process of implicit positioning takes place. Actors relate from their own perspectives, backgrounds, histories, interests and sentiments to the presented data and express in this process element "Where they stand".

Process elements 1. and 2. are past history.

- 3. Expressing and exchanging experiences, thoughts, opinions, sentiments, interests, views, perspectives by storytelling, evokes mutual understanding amongst the actors. This mutual understanding of actors together with the shared analysis (see element 1) creates a shared vision. In the CoP of a farm system, all noses point in the same direction and commitment and engagement arise to move forward to formulating objectives and solutions for the future. A mutual interest and respect arise, 'team bonding' evolves. Following steps are future oriented.
- 4. Implicit in sub process 3., actors develop intentions, drive, motivation and momentum intrinsically. Investing in joint efforts to explore and analyse secures to get 'in process' with each other. The CoP in this way transforms into a learning and development platform. This is further realised by
- 5. Collecting expectations, aims and objectives of the participating actors to get the bigger picture of the ambition level of the CoP visible. Within sessions of the CoP questions like "What do I [actor] and we [CoP] want to achieve? When are we satisfied? What gives us motivation and drive?" are explored.
- 6. Then the CoP brainstorms on scenario's, alternative, possible activities to execute, interventions to make. Here questions like "What can we possibly do? What scenario's do we have in mind? What strategy? What are alternatives? How can we do things differently?" are posed and answered.

With steps 5. and 6. the knowledge-development process makes sense to the actors by connecting the levels of ambitions ("What I/we want!") with possible perspectives and interventions ("What can I/we do?"). This sense making sub process (7.) sets forward a vision on approaching the future.

- 8. Next, the CoP has to choose an agreed intervention using farm system values and criteria of justification, efficiency and feasibility.
- 9. Based on the choice of intervention the CoP designs a farm action planning, that comprises all activities, task, responsibilities, inputs, conditions, contributions, risks, outputs, time frame, monitoring and evaluation for the coming years. When this is mutually fine-tuned and approved transition to the next phase takes place.
- 10. Execution. During this phase, regular monitoring and evaluation take place via plan-do-check-act (Deming, 1986).

Outputs and outcomes of executed tasks can be fed into the 'process cycle' as 'new facts' and thus form a starting point for consecutive reflections and considerations. Also, hick ups

and expected circumstances in due course of realising tasks can be fed in for processes of deliberation and dialogue.

This is the overall process. Each sub-process is advised to be consolidated with 'visual images or pictures' to extend the visualisation processes. This is easily done in form of technical, more rational imageries like task lists, matrices, time lines, responsibility overviews, but also more visionary expressions are possible, such as metaphors, personal stories, et cetera.

Step *four* in the process plays a crucial role in extension work, advisory and consultancy. This step is an intermediate process, standing between step *three* and step *five*. Whenever, as in many development trajectories, this phase might be or is neglected, involved actors immediately start to build up or show resistances. Maurer (2010) recognises three levels of resistance: 1) an attitude of "I don't understand it", "I don't understand what is happening" or "I can't follow what is happening; 2) an attitude of "I don't want this" and 3) an attitude of "I don't like you (as consultant, advisor or extension worker)" In general persons start to resist of oppose developments they are in, because they are not involved, not included, and their values or sentiments are not recognised (e.g. "Not invented here!"), when things go at a too fast a pace. Van Aken (2009), categorises resistance in three groups: 1) not being involved; 2) participants experience back draws; 3) a concurrent feeling of anxiety and insecurity.

On the other hand, when attention is paid to actor's experiences, feelings, beliefs, and findings (step *three*), and there is opportunity to express objectives and ambitions (step *five*) then the CoP gets into flow: motivation is mobilised, members get involved, committed and engaged, and momentum emerges to 'move forward'.

In this process visualisation and imagery are powerful ways to include actors, to involve them in joint CoP developments, to invite them to make explicit and relevant contributions. In working explicit with imagery reciprocal relationships are built. Facilitation supports all these processes.

4. Experiences with advisory work using RISE, based on data, imagery, and the processes

In Denmark, the past four years approximately 200 sustainability assessments have been made using RISE. The RISE polygon (fig 1) functions as an instrument of interaction, communication, learning, development and change within a CoP. It plays together with the written report and has a central role showing complexity and context.

The presentation of the results first only involves farmer, co-workers, extension worker/scientist, farmer's family, and a trained consultant (CoP stage one). The results of similar farms (clustered by sectors or regions) have been analysed and predictable correlations (table 1) and effects of improvement of some parameters on sustainability performance can be included in the discussion the make the effects visible for the farmers. After this it should be decided if short term management actions can be initiated or long term strategical measures, or possibly both.

Seven cases were used in a structured effect analysis in 2015-2016. This was done by contracting seven farms for an expansion of the CoP to include more indirectly, loosely and inter- connected network-circles at different levels of aggregation, such as knowledge agents, information sources, scientific researchers, customers, consumers, chain partners, (N)GO's, or just neighbours and re-analysing the farms after three years. Effects could be seen in the results, though not always clearly, as many things change on a farm. It was seen that co-workers changed job, farms gained more land or changed livestock. Debriefing of the advisors involved in the individual case assessments, as also more general evaluations, gave valuable responses from farmers and advisors. Generally, the farmers were happy with the RISE analysis and results but would have liked a more dedicated follow-up. Some comments; Farmer: I was really confronted with unknown sides of a sustainable farming practice, an eye opener. Farmer: The questions were pushy, and intrusive, but gave some

good ideas on how to reduce environmental impact. Advisor: This is a superb tool to start strategic changes on a farm.

4.1 Data

As mentioned, a high level of expertise is required for a successful advice process. The RISE method is based on using existing data, generated in rotation, crop, and fertilisation planning, feeding programs, economic accounting systems, animal registration systems, and other more or less obligatory programs for farmers. There is no doubt about the objectivity. These data are recognisable for the farmer and used by the expert advisory system. This is one of the reasons why farmers sympathised with the RISE method in comparison to other sustainability assessment tools (De Olde et al., 2016). Using data in the analysis of multiple themes or indicators can lead to interesting discussions on relatedness or correlations (Table 1).

Table 1. Example of correlation matrix* between themes in the RISE analysis, for 17 dairy farms, used in dialogues within the CoP

	Soil use	Animal husbandry	Nutrient flow	Water use	Energy and climate	Biodiversity	Working conditions	Quality of life	Economy	Farm management
Soil use	1	0,03	0,50	0,28	0,20	-0,08	-0,11	0,34	0,01	-0,02
Animal husbandry	0,03	1	0,44	-0,16	-0,23	-0,31	0,06	0,29	-0,11	-0,01
Nutrient flows	0,50	0,44	1	0,34	0,02	-0,45	0,31	0,64	0,16	-0,22
Water use	0,28	-0,16	0,34	1	-0,37	-0,4	0,08	0,47	-0,21	-0,41
Energy and climate	0,20	-0,23	0,02	-0,37	1	0,23	0,49	0,01	0,73	0,37
Biodiversity	-0,08	-0,31	-0,45	-0,4	0,23	1	-0,21	-0,32	0,15	0,43
Working conditions	-0,11	0,06	0,31	0,08	0,49	-0,21	1	0,36	0,64	0,14
Quality of life	0,34	0,29	0,64	0,47	0,01	-0,32	0,36	1	0,10	-0,19
Economy	0,01	-0,11	0,16	-0,21	0,73	0,15	0,64	0,10	1	0,48
Farm management	-0,02	-0,01	-0,22	-0,41	0,37	0,43	0,14	-0,19	0,48	1_

^{*} All correlations are calculated using all variables within each theme, both numerical and categorical, with the R-package *Polycor*.

Topics of discussions were for example on the positive correlations between themes economy and energy and climate (0,73), and economy and working conditions (0,64). It makes sense for farmers to hear and see that the efficient use of energy and resources also gives a better economical result; hence the motivation to work with saving energy becomes interesting. However, the direct link between working conditions (e.g. hard physical stress, long hours, good atmosphere between co- workers) and economical result is not so obvious. The negative correlation between nutrient flows and biodiversity also creates an entrance to discuss possible improvements for on the issue of biodiversity. Data of multiple farms is also used for benchmarking, although the tool is specifically designed for individual evaluation, within the sector or dedicated productions, benchmarking can be an interesting start for discussions.

4.2 Holistic approach

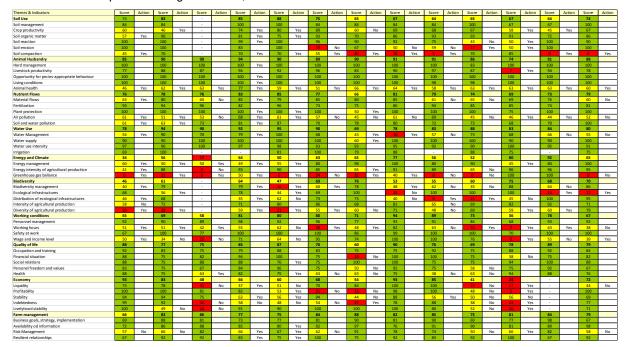
Dealing with or treating the whole of something or someone and not just part of it is the official definition of holistic approach, and exactly what the use of sustainability assessment and visualisation of the whole is all about. When focussing for instance on animal welfare only, one might forget the economic consequences, as improving barn or livestock environment can be costly. On the rebound, a better welfare might also mean savings on the veterinary account or the animal renewal rate, because of increased longevity of the individual (Oudshoorn et al., 2011).

These interactions can be simulated and understood using the RISE model, when discussing the results of the farm analysis with the farmer, including expert advisors.

4.3 Action centred

An important aspect of a successful advisory process is the possibility to let the farmer decide which aspects he or she would like to work with. It is not always obvious for a farmer to start developing an aspect which doesn't trigger interest. Table 2 shows by the colours red and yellow, where respectively problematic and critical results appear for 13 dairy farmers. When the farmer and advisor agree to initiate action, a catalogue of possible measures is presented, and follow up processes can be planned. This part of the advisory track has not yet been sufficiently developed.

Table 2. Parameter scores in RISE for 13 dairy farms evaluated in 2017, showing where action was agreed on after a discussion process using the results, between farmer and advisor.



5. Discussion on the use of RISE as communication and developmental instrument of farms' local practices.

The RISE method implies its importance in use (function and impact) throughout the extension, learning, and development process, where specific values can be identified:

1. Communication processes are based on facts and can be focussed: questioning; dialogue; knowledge, thoughts, insights, findings, perspective, perceptions, elaborations exchange; feedback.

- Open, transparent communication processes exist and create 'team psychological safety' and mutual confidence. This implies the team is a safe place for interpersonal exposure, risk taking, sense of, vulnerable attitudes/positioning, without being embarrassed, rejected or punished for speaking up. (Decuyper et al., 2010)
- 3. 'Team psychological safety' in the process also sets forward larger group potency, group efficacy, cohesion, conducive and increased team learning and development, more team learning dynamics. When expanding the CoP to a larger circle (§ 3.2), more perceptions can be included.
- 4. Items mentioned under points 2 and 3 evoke 'catalyst emergent states', within the process: the growth from team learning processes by catalysing or reinforcing them (Decuyper et al., 2010)
- 5. Visualisation makes it possible, by means of 'active charting', to add on and elaborate on the RISE polygon and catalogue of possible actions.
- 6. Showing and opening up for all actors' perspectives creates connectivity, relation, involvement, understanding, commitment, motivation, engagement (additional psychological elements/catalysts). Actors get more concerned and drawn into the issue; they connect to the 'objective' facts [RISE] and are less disturbed by intersubjective sentiments, emotions, affections, and alike.

The RISE polygon's function (as example of an imagery case) as part of the method and in relation to the in the Community of practice (CoP) is manifold. It is as 1) practical representation of scientifically data 2) attractive and appealing. As overview, it's 3) easily accessible and gives the 4) holistic context. As a 5) shared image 6) actors assemble around it and are less distracted from the content of the process by other psychological or relational 'noise'. It 7) focusses attention, 8) eases interaction and 9) sets forward mutual understanding of actors. It is used as 10) instrument of communication, 11) mediation and 12) joint learning.

5.1 CoP conditions for effectively using RISE after the presentation of the report.

The RISE method involves members, who's role and function in the process explicitly must be stated. Until now the RISE analysis' have been made, reported, and discussed within a team composed of farmer, a selection of co-workers, family representative, and extension worker (s). The members of this so-called CoP (§ 2.2) should have a shared goal: to understand and improve the sustainability performance of the farm, visualised by the RISE dimensions. Dedicated CoP team members should rely on each other to accomplish these objectives. They are involved, committed and engaged. There are no hidden agendas. In farm CoP's, individual expertise, roles and responsibilities are clearly identified. Critical thinking and a balanced division of 'team' roles should be secured (Belbin, 2010). Effective communication is important by means of agenda's; information and feedback are given and reported, with an open mind. However, in a structured group process there should be a professional facilitator involved, which has not been the case until now.

5.2 Facilitating conditions for CoP

Members of the CoP need constant involving, committing and engaging for keeping them in process using the RISE method. For this a wide range of proficient facilitators' competencies are paramount. Extensions workers that are CoP dedicated will have difficulties playing such a role (Bekkering and Walter, 2011) See appendix 'Checklist Assessment Competencies of RISE Process Facilitation'.

Dealing with RISE in this participatory process, a sustainable longterm approach is necessary to guarantee continuity. It is practice recommending a RISE analysis every 3-4 year, meaning the execution of measures or strategies agreed on can be validated and adjusted or reconsidered. The challenge is to keep the farm CoP focussed and to keep the bigger picture vivid.

Especially in monitoring, evaluating, adapting, fine-tuning, re-planning of executive tasks and activities, the RISE method is essential. In their action planning, a farm CoP can agree on a more "hands-on" way to relate to the progress on the RISE parameters. This could be facilitated by an action catalogue, referring specifically to the parameters measures within the themes of sustainability. An action parameter is for example energy consumption. When mutually agreed on this focus, a way of monitoring and steering can be chosen, so the parameter can be carefully followed and adjusted if necessary.

6. Conclusion

The basic needs for a successful farm advisory track are 1) a high level of expertise, 2) ability to place specific farm challenges in a holistic picture, 3) to be able to facilitate the process to transform the farm's knowledge system into a mode of autonomous, sustainable learning, by 4) letting the farm's community of practice (CoP) decide itself what is needed and what should be done, 5) initiate a dedicated follow-up.

Evaluation and reflection of practising on-farm sustainability analyses based on the RISE (Response Inducing Sustainability Evaluation) methodology showed that the RISE method contains many of these ingredients. The analysis stage is grounded by objective data, based on expert advice; sustainability assessment at farm level itself is the key to holistic approach. The use of imagery together with the theme and parameter quantification helps understand and operationalise the holistic approach. The farmers' inner and outer community of practice, which are involved in the identification of challenges and actions to be taken, makes the farmers feel an ownership of the decision made.

The RISE method however, needs a structured description of the process around data collection, discussion, focussing and follow-up. The introduction of a facilitator is identified as a way to secure the process and secure an optimal implementation of the results.

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Appendix

Checklist facilitator's competencies

- 1. Is facilitator proficient to describe status of ideas?
- 2. Is facilitator an independent actor within the Community of practice (CoP) system? In other words, is facilitator able not to become influential or judgemental in the CoP?
- 3. Does facilitator monitor and watch over agreements and rules of play?
- 4. Does facilitator determine CoP's social bases and support for intentions and achievements?
- 5. Does facilitator determine/explore whether or not achievements are feasible?
- 6. Does facilitator inform all actors equally and evenly? Does facilitator feedback reach agreements and/or consolidations?
- 7. Has facilitator fully insight in the intentions and interests of involved actors?
- 8. Does facilitator put emphasis on mutual dependencies?
- 9. Does facilitator explore and assigns rules of play for each upcoming process phase?
- 10. Does facilitator check whether process facilitation aligns with objectives [per phase]?
- 11. Does facilitator know whether commissioner represents problem owner?
- 12. Does facilitator is one step ahead of the CoP concerning feasibility and social basis?
- 13. Is facilitator proactive in what is and what is not specified [norming]?
- 14. Does facilitator steer in subjects to be discussed by the CoP? Or does facilitator enhances the agenda design process?
- 15. Is facilitator aware of timing activities? [Process planning skills]?
- 16. Does facilitator monitor sequence of activities in the execution?
- 17. Does facilitator select members of the CoP?
- 18. Does facilitator arrange venues for CoP sessions?
- 19. Does facilitator set the tone in communicating information?
- 20. Is facilitator aware of the joys and burdens of the contributions of various actors?
- 21. Is facilitator able to observe movement and/or momentum caused by consecutive happenings in the process?
- 22. Is facilitator able to secure an atmosphere of safety, discretion, integrity, openness and interaction?
- 23. Has facilitator feeling for the power of ideas? Is facilitator able to describe the power impact of certain ideas?
- 24. Is facilitator sensitive to understand developments from felt ideas to desired, tangible outputs?
- 25. Has facilitator a toolbox of approaches, methods, instruments or techniques to intervene appropriately and adequately in a wide range of socially diverse situations?
- 26. Is facilitator aware of her/his individual role within a CoP?
- 27. Does facilitator propose rule of play and rule to process information?
- 28. Does facilitator grasp the essence of RISE?
- 29. Is facilitator able to keep the members of the CoP motivated?