



Evaluation of SOAR -

External Evaluation Report

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Context

SOAR was approved as a Research School for Organic Farming and Food Systems on June 25, 2001 for a five year period. It is located at the Royal Veterinary and Agricultural University (KVL) in Denmark, but half of the enrolled students work on other research institutions and several are enrolled for PhD degrees at other universities. According to the statutes, SOAR is to be evaluated well before the end of the initial period. An evaluation is also needed since SOAR has received support from several donors. The team was appointed by KVL's pro-rector of research in November 2004 and the evaluation report was to be finished by the end of January 2005. In the terms of reference the overall objectives are specified in this way: "to assess whether SOAR has created an enabling environment where SOAR's goals are fulfilled and to suggest possibilities for improvements". The evaluation team included 3 peer researchers within the broad spectrum of disciplines covered by SOAR and one representative from the PhD study board of KVL:

- Assoc. Prof. Johannes Michelsen (team leader), University of Southern Denmark
- Prof. Carlo Leifert, Newcastle University
- Assoc. Prof. Egbert Lantinga, Wageningen University
- Prof. David Collinge appointed by the PhD study board of KVL

Academic Assistant Sofie Kobayashi of SOAR has been the secretary of the evaluation team.

Since the beginning of the 1980's organic food and farming has received increasing interest among European farmers and consumers and in all other parts of the world for diverging reasons focussing on different aspects of the practices associated with organic food production and consumption. Political interest has also been growing and is reflected in the development of public research programmes – first within national contexts but to a growing extent even within international (not least EU) contexts. In Denmark, farmers and consumers are very interested in organic food and farming – and DARCOF is a very ambitious research network that combines researchers from most Danish universities and research institutes with activities relevant to organic food and farming under a common umbrella and contribute to financing PhD-students situated in many different research environments. The Danish university with most activities within organic food and farming research is KVL where most of the relevant Danish PhD-students are enrolled – and SOAR is located.

Research in organic food and farming is developing fast these years all over Europe. The main themes of this research are applied agronomics focusing on finding solutions to practical problems. To the evaluation team it appears that European research in organic food and farming too often lacks scientific rigour and creativity in terms of developing projects based on the specificities of organic food and farming in itself rather than on the differences between organic and so-called conventional food and farming. The specifics of organic agriculture involve a need for research based on multifactor or integrated methodologies and approaches able to grasp and solve problems as implied by organic agriculture principles or practices or defined by organic farmers. In addition, there is a need for research based on a fundamental understanding of the multifaceted character of organic farming and of production / distribution practices for instance on the basis of farmer or other stakeholder participation. Hence, the development of organic food and farming poses new and yet unsolved challenges to the European (and global) academic community. These challenges are to be met by education of researchers focusing on ways to cope with the ideas and principles that define organic agriculture in theory and practice. Against this background, the evaluation team finds it clearly justified to establish SOAR as a research school specialising in organic food and farming.

SOAR was established as part of the Danish education of researchers which is strongly formalised and aim at systematising the PhD-studies. A Danish PhD degree requires a period of 3 years of study and

most PhD studies are financed by 3 year scholarships. The PhD degree is based on a thesis, participation in a minimum number of research courses (30 ECTS), some teaching and a facultative study abroad. Two supervisory roles are recognised. The main supervisor is responsible for the formalities of the education, and the project supervisor for the scientific research project. The roles are often combined in one person, but the term main (or head) supervisor *de facto* also covers project supervision. Externally placed students have a project supervisor at the research institute. Finally, the dissertation is defended in front of a panel of external examiners in public. One aspect of this formalisation of PhD-studies is the supply of relevant research courses through research schools. They were initiated recently and research schools have now been established by the universities within distinct research areas. The research school concept is still fairly new at KVL and the relative roles of university study programmes with a coordinator in each department and the interdepartmental and institutional research schools with their leaderships is still being defined. Currently, there are 13 research schools at KVL and SOAR is one of the larger ones. In Denmark it is the only one focussing on organic farming and food systems. SOAR is cooperating closely with a Swedish research school in organic farming and is active within a Nordic network covering Baltic countries as well.

SOAR was founded in collaboration by KVL and DARCOF, with financial support from the Danish Research Agency (FUR). Among the general objectives mentioned in paragraph 2 section 1 of the statutes, the evaluation team wishes to stress the following: “to improve and strengthen education at the PhD level within organic agriculture and food systems”, “to provide the tools for students to work interdisciplinary and systemically”, “to enhance interaction and cooperation between universities and sector research institutions in post graduate training” and “to improve the competitiveness of research training internationally” because they express a fundamental understanding of organic farming research as based on interdisciplinary and/or systemic studies, the need for national cooperation and international ambitions. The scientific challenges involved in these objectives are clearly reflected in section 2 of the same paragraph in the statutes where 8 research areas are listed ranging from plant health via agro-technology and livestock production to food quality and consumer preferences for organic food. The evaluation team strongly agrees that the scope of organic farming is so broad and find SOAR’s ability to cope with these challenges within a network of national and international cooperation decisive to the overall result of the evaluation. In addition the evaluation team has given special attention to the interaction between SOAR and the industry/stakeholders of organic food and farming.

As basis for the evaluation, the evaluation team has read statutes, annual reports, SOAR’s self evaluation report as well as summaries of the three finalized dissertations available at the time of evaluation. In addition, the evaluation team has spent one day in Copenhagen interviewing selected PhD-students, supervisors and members of the scientific advisory board and finally the head of SOAR and the pro-rector of research at KVL (see annex 1 for a list of interviewed). The findings are described in the following sections: 1. *Status quo* focusing on the scientific relevance and value of activities; 2. *Future* focusing on both scientific and financial capabilities to adjust to expected changes in the research agenda and in funding followed by 3. *Assessment and recommendations* regarding both the existing activities of SOAR and the potential for developing activities.

1. Status quo of SOAR, January 2005.

In the self evaluation report, SOAR expresses its aims as being “to improve the quality of the PhD education, raise the scientific level of research within areas relevant to organic agriculture by training the PhD students to deal with complex problems and to create an attractive research environment for the PhD students in SOAR”. The extent to which this has been done successfully is the focus of the status quo assessment although the evaluation team also emphasizes the national and international network aspects of SOAR.

a) General impression: scope, size, activities

The general impression of SOAR is that it is functioning well with a high and consistent level of activities based on bi-annual seminars and summer schools involving PhD students and their supervisors at varying levels. The content of seminars and summer schools is discussed below. It is impressive that SOAR up to now has been able to recruit 29 PhD students and projects. It is equally impressive that they are recruited from a broad range of Danish universities and research institutes as well as via own scholarships and it reflects success in establishing a national research network. A high number of participants is a necessary precondition for realizing the very broad scientific scope of SOAR.

Regarding the themes of the PhD projects, the list of projects is quite comprehensive and projects are central to the area. Among themes missing, the evaluation team wishes to mention farming systems research and health issues. Projects seem strongly attached to traditional disciplines while the level of interdisciplinarity seems to be low. Similarly, the level of interaction between SOAR and the organic farming organizations and other stakeholders seems to be low.

SOAR manages the broad scientific scope by placing all PhD projects within one of three major themes:

Theme 1: organic crop production, nature quality and resource management (13 projects)

Theme 2: organic livestock production and health (7 projects)

Theme 3: organic agriculture, food production and society (9 projects)

These themes are still very broad and it seems problematic to the evaluation team for individual PhD students to find projects with which they share other interests than organic food and farming. The PhD students interviewed could not identify themselves with the themes and it seemed more relevant for them to form groups based on educational background. A background in natural sciences or in social sciences seems to imply very different basis for dealing with SOAR’s aim to promote interdisciplinary understanding. A minimum number of projects in each theme is important for the identity of PhD students – and the evaluation team suggests that a theme should not include fewer projects than 10 projects to secure continuity and reciprocity while recognizing that each project is only staying in SOAR for about three years.

When realizing the importance of a high number of participants it is worth mentioning that the number of new projects has decreased to only 2 in 2004. This is ascribed to the running out of DARCOF’s second term which causes fewer funds in research projects being channeled into research education. Simultaneously, the Danish Research Agency was under restructuring in 2004 and released less funds to be channeled through the research schools. It is clear that the third DARCOF program (FØJO 3) which will start by the end of 2005 will give opportunities for initiating a number of new PhD projects. It is further anticipated that the Research Agency will allocate stipends through the research schools again in 2005 on a competitive basis.

Scientific exchange has taken place on a Nordic/Baltic level, but it seems that only limited participation in SOAR's own arrangements by foreigners has resulted – and likewise it seems that PhD students enrolled in SOAR nearly do not participate in arrangements offered by Scandinavian or other organic research schools unless SOAR is co-arranger. The explanations given to the evaluation team was that SOAR covers the specific needs regarding organic food and farming for the Danish PhD students while the rest of their education includes courses on disciplinary issues related to the concrete projects. Regarding participation of international speakers this is underestimated in the self evaluation report where only two foreigners are mentioned – and both from overseas contexts (Canada and Australia respectively). They were visiting professors of SOAR and this model appeared inapplicable under SOAR's practical conditions where most students are dispersed over locations all over the country. In reality, the summer schools have included several European speakers. The evaluation team wishes to express the need for further involvement of international speakers and participants as means for realizing the international scope and the ambition of SOAR mentioned in the statutes of improving the international competitiveness of research training.

b) Overall organization – including head and secretariat

SOAR is including all projects enrolled at KVL and all projects coordinated by DARCOF. In this way SOAR involves nearly all Danish PhD projects on organic food and farming and Danish institutions (universities and research institutes) where these projects are situated. The research in organic food and farming is taking place in scientific environments with general research interests. This clearly justifies the need for a network such as SOAR specializing on defining organic food and farming and designing projects on these issues. This view was vigorously supported by all PhD students and their supervisors. The other side of the coin is the extent to which SOAR and the projects profit from being situated in general research environment and/or the general research environments profit from including projects on organic food and farming. The evaluation team asked whether PhD projects appeared isolated as 'strange' alternative projects in the general research environments, dominated by the general research environments to such an extent that it appeared hard to adopt theory and methodology to the specific circumstances of organic food and farming, or a fertile dialogue was going on regarding theory and methodology. No clear and unambiguous answers were given from PhD students and supervisors. The situation in all institutes and departments is that there are only few other PhD students and that all of SOAR's PhD students feel a pressure to concentrate on their project theme and hence the disciplines rather than promoting the specific issues and the interdisciplinary aspects demanded by studies of organic food and farming. The main reciprocity regarding the PhD projects concerns the interplay with the supervisors. SOAR thus fills the role of building networks to other organic food and farming PhD students and of establishing a broader context for the project relevant for both PhD students and supervisors.

In the self evaluation report ch. 7.6, SOAR mentions 5 Danish projects not included in SOAR. This indicates a capacity to identify projects and it seems to the evaluation team that not many more are to be found. It appears relevant for SOAR to keep trying identifying this kind of projects and offer them participation in SOAR. In the self evaluation ch. 8, SOAR suggests increased information and contacts to other universities. The evaluation team finds it better to use resources on identifying relevant researchers and projects and make them know about SOAR and its services.

SOAR is primarily a Danish network, but the evaluators found it important to ask about the contacts to foreign research into organic food and farming. International competitiveness is mentioned among the objectives of SOAR and to the evaluation team this presupposes intense international contacts. As mentioned above, SOAR's international activities are limited. To this should be added that only one institutional contact outside Scandinavia is mentioned – the University of Makerere in Uganda. PhD students are encouraged to include studies abroad in their project plan and SOAR attempts to

encourage individual international contacts. Impacts of these encouragements are not counted or measured in any way and were still unclear to the evaluation team after interviews. The evaluation team mentioned during interviews that it found it striking that SOAR seems to have no formal contacts in Europe although European research activities are known and mentioned in the self evaluation - and although KVL and DARCOF as the main stakeholders of SOAR have formal cooperation with European universities and research institutes regarding a joint master degree in organic farming and joint research projects. It appeared from the interview with members of the scientific advisory board of SOAR that employees of KVL and DARCOF have many informal contacts regarding organic farming research throughout Europe. These contacts had not yet been activated, however, with regard to SOAR's objectives. The evaluation team finds that SOAR will profit much if it immediately begins to make formal arrangements regarding as many aspects of PhD education as possible with relevant European partners. In addition the issue has turned the interest of the evaluation team towards the way in which the division of labor between KVL, SOAR and DARCOF respectively is organized. It seems that SOAR needs stronger lines of communication with DARCOF in order to strengthen the exchange of information regarding all aspects relevant to research education. Regarding KVL, SOAR may raise some issues regarding resources and formal competence in order to be able to make binding formal arrangements with European partners.

The formal structure of SOAR includes a head of school covered part time by a member of KVL's permanent staff who is free to act within the budget in close collaboration with the head of DARCOF and the pro-rector of research at the KVL and guided by RVP - the Scientific Advisory Board. RVP includes representatives of KVL, of other institutions under DARCOF than KVL and of PhD students. RVP is both the link between DARCOF, SOAR and KVL and the link between SOAR and all the other institutions associated with SOAR (usually via DARCOF). One link is clearly missing: a link between SOAR and the industry of organic food and farming – although contacts might be mediated via DARCOF.

RVP seems to have played an important role in the initial period of SOAR and positive statements are given about its functions. However, the relevance of RVP was opened for discussion both by the head of school and of the member of RVP originating in DMU. A further issue is that SOAR appears not to be very visible in the KVL environment in relation to other research schools. Against this background it might be worth considering changing RVP into two formal organizations. One should only include the head of school, one representative of DARCOF and one of KVL (for instance representing another research school) meeting on a regular basis and dealing with issues that involve DARCOF and KVL directly for instance regarding the distribution of stipends. The other organization should deal with the general development of SOAR and including representatives of all institutions with students related to SOAR and representation of the organic food and farming industry/stakeholders to meet once or twice a year. This might contribute to serve several purposes: it may contribute to solving the above mentioned communication problems between SOAR, DARCOF and KVL, it may open new options for reciprocity between SOAR and hosting institutions, and it certainly opens new options for communicating with other stakeholders than those elected for RVP – whether of a scientific nature or not.

In the self evaluation report, SOAR mentions some problems regarding the communication within the financial and organizational structure of KVL. The evaluation team does not feel qualified to make suggestions for solutions other than those to be found by the actors involved. It appeared during discussions, however, that the scientific competences at KVL associated directly with SOAR and with organic farming in general has been reduced dramatically in SOAR's lifetime. The first head of SOAR was a temporary professor, but he has now left the position as head of SOAR for another position at KVL and the temporary professorship has not been reoccupied. At the same time another temporary professorship on organic farming has not been prolonged. Finally, KVL's full professor with the closest association to organic farming has not given SOAR more attention than other KVL supervisors. To the evaluation team it seems quite inappropriate to run a research school without a full professor. It is the experience from universities such as Wageningen that a full professor with international recognition is able to attract many MSc and PhD students.

Under the given circumstances, it was clear to the evaluation team that the current head of SOAR, Assoc. Prof. Henning Høgh Jensen, after his recent appointment has done a good job in safeguarding an undisturbed continuance of SOAR's activities. In the interview, HHJ demonstrated that he sees a real role for SOAR as a place for research *training and education*, which evaluators find should be the main characteristics of a research school, as opposed to the mere research *product* interest of external financiers, skilled researchers and project leaders. HHJ told about the opportunities he sees for developing an educational area, about a realistic analysis of SOAR development potential and the results of scanning options for realising the need for expansion via alliances in Scandinavian, selected European and to some extent even global groups of organic farming research. In summary, the evaluation team finds HHJ to be the right man at the right place.

SOAR has a part time academic secretary at its disposal. Given the high number of PhD students and the high level of internal activities, it seems that the head and the secretary are doing a good job and have sufficient resources at their disposal. It is clear to the evaluation team that the existing structure has enabled a quick and consistent establishment of an encompassing national network and research school on organic food and farming. If more activities are to be added to the management, it seems necessary to increase resources.

SOAR is clearly organized with a focus on servicing PhD students and their supervisors. SOAR is quite good in reaching out for Danish PhD students and it is a very good idea to list potential and actual supervisors regarding PhD projects on organic food and farming. It is also clear from the surveys included in the self evaluation, and covering about 2/3 of PhD students and a smaller share of supervisors, that both groups are in general very positive towards SOAR and its activities.

In the self evaluation ch. 8, however, SOAR mentions a relative negligence of SOAR among supervisors. In the interviews, this analysis was confirmed. PhD students would like further involvement of their supervisors in SOAR. Supervisors found it, however, quite difficult to integrate more – not least for reasons of lacking resources. The problem of resources was clearly expressed as a problem for sector research institutions. Resources for supervision does not include resources for participating in workshops, conferences etc. On the other hand, KVL is now expressing in general collaboration contracts with sector research institutions that KVL will not pay more for supervision etc. Hence, SOAR cannot itself solve all the resource problems of involving supervisors. It might, however, be suggested that projects connected to SOAR should include specific resources for supervisors' participation in SOAR arrangements. Among supervisors a demand for more information on the projects included in SOAR was expressed. It might also be worth discussing whether SOAR (for instance in cooperation with DARCOF) should make some more specific offers for supervisors and other senior researchers with an interest in organic farming studies for instance regarding arranging or distributing knowledge on conferences, symposia etc. Other aspects of stronger

involvement of supervisors are to give lessons on seminars, which some do already, or to act as acquirers of (national/international) external funding for PhD projects which is seldom today.

The issue of supervisor involvement even turns the interest to another issue of broadening the target group of SOAR in order to invite post doc's and other researchers whether newcomers or more experienced researchers regarding organic farming to take part in seminars and courses. This is allowed in the KVL system and it takes place to some extent today. This course of action might be intensified to serve as a basis for further recruitment of participants in arrangements (provided a payment system is installed) and strengthen the basis for deeper scientific discourse.

c) Course organization and themes

The main tool of SOAR is to arrange courses of relevance to the PhD students. In general the number of courses is high: already in 2001 SOAR arranged one seminar and a summer school and since then two biannual courses and one summer school has been arranged every year together with different Nordic partners. Participation in summer schools is constant: 14-16 although the number of PhD students is increasing. In general the participation in biannual seminars is even lower (10-13) with the exception of autumn 2003 (20 participants) where 24 supervisors also participated in a separate course on supervision. In the survey of PhD students the voluntary participation in biannual seminars is assessed very positively. In the self evaluation chapter 8, SOAR does, however, characterize participation as "not optimal" and suggests a series of practical improvements. It appeared, however, during the interviews that a main problem seems to be that SOAR courses are seen as supplements to courses within the disciplines within which the PhD students are doing their theses. There does not seem to be competition regarding the issues taught at the different SOAR seminars.

Courses are an obligatory part of Danish PhD education. A SOAR summer school counts 4 ECTS and it is mandatory for PhD students at SOAR to participate in two summer schools. In the survey of supervisors summer schools are evaluated quite positively although some negative answers also appear. In the survey of PhD students, summer schools are assessed rather positively except for the mandatory participation in two summer schools, where 1/3 of the answers are negative. Given the facts that i) a comment on a summer school was that students of technical and natural sciences in general appeared less informed about theory of science than social science students (which is recognizable by the evaluation team) and ii) an ad hoc seminar of a mainly social science content was arranged in 2004, it seems fair to assume that the negative assessments of summer schools originate among social science PhD students. If this is right and given the fact that SOAR through the mandatory courses is obliged to adapt to the interests of participants it seems fair to keep participation in two 4 ECTS courses mandatory for students enrolled in SOAR. This analysis was opposed by SOAR, who stated that opposition was largest among students with a natural or technical background. However, this cannot be confirmed by the anonymous survey. In any case, the evaluation team finds it necessary to keep obligatory participation in two 4 ECTS courses provided this will not be administered too rigorously.

As an introduction to considerations of the themes of courses it seems worth emphasizing once again the relatively low involvement of international speakers and the very low level of cross participation with PhD students from abroad whether from Nordic/Baltic countries or from other countries. Summer schools focus on issues of theory of science along with general problems of organic farming and food. The programs of the summer schools appear very well designed. The topics are very well chosen with an increase in interdisciplinarity and structure and there is no doubt that they are very relevant to the students and to research into organic food and farming in general. However, the evaluation team find it worth to open a discussion on whether the themes are moving too far in the direction of themes that place organic food and farming research as a rather exotic scientific phenomenon based on ideas,

values, theories and methodologies that seem very far from or in direct opposition to basic ideas of mainstream sciences. The majority of speakers at summer schools are experienced Danish (and to some extent) Swedish and German researchers within organic agriculture. It is clear that summer schools should be used as a means to communicate original research experiences in organic farming, but it seems worth considering opening up the sessions more for well-known international speakers and researchers with broader experiences. The evaluation team is aware that such a view is opposing the ideas mentioned by SOAR in the self evaluations ch. 8 where SOAR admits the narrow scope of students' projects and use of standard methodologies but then define SOAR's aim as attempting to expand the research focus of the PhD students. It is also clear that resources are scarce and pose limitations to the content of summer schools, but perhaps reciprocity and collaboration with foreign universities and research institutes might help in this direction. In addition, it may also be suggested that PhD students make formal presentations of their project for relevant research capacities participating in the summer schools as a kind of extra supervision/master class.

Related to the above overall discussion is the issue of how to cope with the issue of interdisciplinarity and definitions of organic farming, which stresses the exceptionality of organic farming. It seems important to introduce to the students different strategies of coping with interdisciplinarity including both very deep and theoretical consistent perceptions of organic food and farming and more pragmatic ones. This point of view was clearly supported by one of the very experienced supervisors who demanded more concrete tools for coping with interdisciplinarity although he was in general very positive to the merits of SOAR.

The introduction of one ad hoc course in 2004 suggests that SOAR is trying to adapt to 'user needs' accepting that not all PhD students may find all summer schools equally important. This is a very positive development but it may appear expensive and thus emphasizes the need for increasing the budget – one of the means being increasing recruitment. In addition, it turns the attention towards the fact that it seems difficult to find clear ways of combining social sciences and technical/natural sciences. This is a general problem of interdisciplinary research and it might trigger further discussions at or among the host institutions of which many have long experience in coping with these issues. Perhaps it could be a task for SOAR to host seminars where this kind of experience was documented and exchanged.

The content of biannual courses is usually rather pragmatic focusing on relatively technical aspects associated with planning projects, taking and giving supervision, rhetorics, making EU applications etc. Biannual courses take place at the host institutions where ongoing research is presented. This seems a good combination and it is backed up by participants. A point to discuss is whether the thematic groups could be used during biannual courses for instance with regard to the PhD students presentation of work-in-progress to which there seem to be left only little space in the overall supply of courses.

The lack of contact with the organic food and farming industry might lead to considerations regarding the structure of summer schools. It seems relevant for students to participate in activities where research results are communicated to practitioners. It might for instance be worth considering that PhD students present or discuss their projects in separate sections relating to DARCOF's participation in domestic and international conferences on organic food and farming.

d) Value for PhD-students

The surveys included in the self evaluation and the evaluations referred after each arrangements show that the PhD students and their supervisors find that SOAR is successful in supplementing the specialization of each project and agree in this goal. Against this background and the relative intense

activity within SOAR it is rather astonishing that the PhD students find that SOAR has only limited success regarding contributing to building research networks. This may be a result of the very broad scope where students find that networks within their main discipline are more important than within organic food and farming research. It is also astonishing given the fact that most of the PhD students have their workplace rather isolated and distributed over many institutions with 9 and 6 located at KVL and DIAS respectively although dispersed on several departments, 3 at DMU and Risoe and the remainder spread over 7 institutes with 1-2 on each. When confronted with the relatively negative assessment of SOAR contribution to building research networks, the 5 PhD students interviewed could not identify with this attitude. They mentioned that the kind of network obtained through SOAR was not those of the disciplines within which the projects were made, but they found it very positive to find colleagues with knowledge and interest in similar issues as themselves regarding organic farming, sustainability, interdisciplinarity etc. It remains clear to the evaluation team, however, that the networks SOAR contributes to *supplement* those of the main disciplines, which appear of primary importance to the students. This might lead SOAR to consider in what ways SOAR is able of assist students in combining disciplinary and interdisciplinary networks for instance when attempting to find channels for international publications.

Another impact of SOAR to the PhD students might be a direct input in their PhD theses. According to both the self evaluation report and to the interviews made by the evaluation team, the major problem seems to be the opposite: that some students find it hard to see the connection between SOAR activities and their project. At the same time, however, some students find that the course program did not sound valuable before participation but after having participated they found themselves quite happy with the arrangement. A third 'test' of SOAR's impact on PhD projects is the extent to which SOAR activities are reflected in the theses. Only a very cursory investigation has been done by the evaluation team on three of the finished theses. The three students participated in interviews and agreed in the conclusions made by the team

Dorte B. Dresbøll's dissertation, "Optimization of growing media for organic greenhouse production", is properly done natural science based on well known methodology. Two critical comments may be made regarding the possible impact of SOAR on the project: it was based on a primarily conventional approach and it did not sufficiently take into account what is going on in organic farming. In conclusion SOAR does not seem to have any direct impact on the study.

Bea Nielsen's thesis on description and developing production systems of organic beef based on bull calves from organic dairy farms. The experimental work was done before the start of SOAR - between 1999 and 2001 and as a consequence, SOAR has only had little impact on this part of the thesis work. A paper submitted Feb 2003 describes a model to optimise decision making in organic steer production. However, since this model is mainly based on earlier work by the second author, much impact of SOAR on this work is not expected. A paper still to be published includes data collected between January 2000 and April 2002. In conclusion, the thesis work of Bea Nielsen i) cannot be used to judge possible impacts of SOAR, and ii) is a classical thesis showing hardly any interdisciplinarity.

Chris Kjeldsen's thesis is a social science project: "Modernisation, time, space and organic food networks". It relates to organic farming in two ways: organic farming is seen as a possible alternative to negative social and ecological consequences of functional differentiation and distancing of food networks in time and space – and all empirical cases involve distribution of organic food products. An impressive list of references includes literature from a broad range of social science approaches and (mainly social science) analyses of sustainability. The author is educated as agronomist and so well experienced in interdisciplinary work within the social and environmental sciences that he hardly has profited much from SOAR in this respect. He may have contributed to understanding organic farming alternativeness among other participants in SOAR. The thesis ends up in stating the limitations of

organic food distribution regarding progressive social and ecological objectives, which implies a critical attitude towards parts of the current practices associated with organic food production and distribution. In conclusion, SOAR seems to have profited from CK's knowledge while it is doubtful whether SOAR has had an impact on his project.

The merits of SOAR for PhD students are thus not very obvious from the PhD students' point of view. The interviews showed, however, that SOAR could make concrete contributions to finding colleagues and relevant test sites and results for instance regarding organic pig production. In addition, the PhD students realized that they had got an important introduction to the philosophy and general background of organic food and farming, which might not be directly reflected in their work but contributed to a deeper understanding of what was taking place in and around farming in general and organic farming more specifically. Supervisors had a different perspective and found the contributions of SOAR valuable on a general level. One supervisor was able to compare the work of PhD student before and after SOAR began its activities. He found that SOAR has a clear long term impact on PhD students that became very visible when they after having finished their PhD project went on to new research projects or for other types of job with relation to organic food and farming.

e) General achievements

It was clear to the evaluation team when the mission began that SOAR was not very well known in the international research community on organic farming although many activities take place in English. It also appeared from the interviews that information is still lacking even among some of those directly associated with SOAR although SOAR has a clear and internet based communication strategy. Hence, a stronger, clearer and more internationally oriented strategy of communication seems necessary.

The team was impressed by the strong engagement and determination that characterized all those we met during the interviews. Not least PhD students showed a high competence in making critical and independent statements on organic food and farming in general and on their own situation, based on proper reflections both regarding the questions asked and the content in answers and other statements. In addition, supervisors, members of the scientific advisory board and the staff of SOAR all had a positive attitude towards the evaluation and to the aim of trying to assess and improve the impact of SOAR.

Summary of and recommendations regarding status quo

In summary, the evaluation team finds that SOAR has been able to establish a research school with a high and consistent level of activities based on bi-annual seminars and summer schools involving PhD students and their supervisors. SOAR has up to now been able to recruit 29 PhD students and projects from a broad range of Danish universities and research institutes and this reflects *a successful establishment of a national research network including both universities and sector research institutes*. In this sense it appears to the evaluation team that SOAR has fulfilled the aim “to improve the quality of the PhD education, raise the scientific level of research within areas relevant to organic agriculture by training the PhD students to deal with complex problems and to create an attractive research environment for the PhD students in SOAR”. The international and interdisciplinary ambitions are high while impacts of SOAR for PhD students remain not very easy to detect. Important long run impacts were mentioned by an experienced supervisor, but still SOAR is too young to make final and fair assessment of impacts. The evaluation team has raised the following issues and made the following recommendations:

a) International cooperation to be strengthened

The international scope and the ambition in statutes of improving the international competitiveness of research training have not been fully realized. Not least are the contacts in Europe too weak although research activities are known, KVL participates in a joint European master degree in organic farming and DARCOF in many European networks and projects. It also seems that SOAR could stimulate PhD students' international networks and participation in recognized symposia, workshops or conferences.

b) Need for more reciprocity with hosting institutions and the food and farming industry

The level of reciprocity seems low between PhD students and SOAR on one side and hosting institutions other than KVL on the other – and there is close to no relationship with organic farmers and other stakeholders in the organic food and farming industry. Consideration may be needed regarding the formal structure and contacts with hosting institutions – and a suggestion is made to split RVP into one part focusing on management and another part focusing on contacts with other institutions and stakeholders. Fertile scientific dialogue might need promotion supported by SOAR. Rather than offering information to other institutions, SOAR should try to identify relevant researchers and projects and make them know about SOAR and its services. Regarding the content of reciprocity it might include discussions of how to cope with interdisciplinarity and concrete problem areas with experienced researchers and practitioners.

c) Broader recruitment

The number of PhD students is impressive but the interdisciplinary character of SOAR also implies a strong demand for many participants. SOAR might direct its interest towards recruiting post doc's and other senior researchers with interest in organic farming research as participants in arrangements and as receivers of information on conferences, symposia and other items on organic food and farming research – perhaps in cooperation with DARCOF. SOAR may also turn its attention towards international alliances regarding joint teaching of PhD students.

d) Themes and activities of summer schools and seminars

A broader international recruitment of speakers might attract more interest among PhD students and others – including foreigners. In addition, SOAR might profit from a more direct scientific dialogue with basic ideas of mainstream sciences – including discussions on how to cope with interdisciplinarity. It seems worth to give PhD students more opportunities to make formal presentations of their project for relevant research capacities at summer schools as a kind of extra supervision/master class.

2. Future

Being a 5 year initiative the future of SOAR is unclear. As mentioned in the terms of references there are at least two aspects of SOAR's future: development in the research agenda and in funding. The evaluation team only has limited access to knowledge regarding the future agenda of organic food and farming research and the potential for funding. It is clear, however, that external research funding on both the national Danish level and on the EU level is available and hence that research in organic food and farming will take place in the years to come. It became equally clear during the interviews that the initial financing of SOAR is not to be continued. Hence, although the evaluation team finds that SOAR has performed quite well, a simple continuation of the activities is not possible. SOAR has to find new types of funding in order to keep its current activities going. Regarding the issue of SOAR's role in the future of organic food and farming research education, it strongly depends on the interests of KVL and DARCOF as the two main stakeholders in SOAR – and on the capability of SOAR to see and exploit opportunities in terms of recruitment of students, networking with national and international research and research financing institutions.

According to the pro-rector of research, KVL has no overall strategy applicable for research schools in general or specifically for SOAR for the moment. DARCOF has a strategy of participating in European projects and is heading for an extra four year period based on funding from the Danish government. Given these strategic elements it seems clear to move on in formulating a separate strategy for an organic farming and food systems research training strategy that combine national and European components.

Regarding SOAR's capability to adjust itself to the situation after the initial period, SOAR mentions several options, a vision and a strategy in the self evaluation report. All issues need a much more thorough analysis than the statements included in the self evaluation report and than the evaluation team is able to do even after having done the interviews. In attempting to promote the development of a clear, consolidated and operational strategy for SOAR, the evaluation team has initiated the first steps of a SWOT analysis by asking all interviewees to consider the three main strengths, weaknesses, opportunities and threats to SOAR and organic farming research education. The result of this survey is annexed to the report. Below we will comment on the vision and strategy mentioned in the self evaluation report.

Regarding vision, SOAR is emphasizing the following aspects which accord well with the recommendations regarding status quo made by the evaluation team above. SOAR is “to offer internationally recognized research training that attract PhD students interested in organic farming and food systems from Denmark as well as other countries”.

SOAR's strategy is to grow in size – also in line with the recommendations of the evaluation team mentioned above. SOAR suggests two ways for growth: growth in the national context and in the international context with a main focus on Europe.

The evaluation team cannot make definite recommendations on the strategy on the basis of the knowledge available. The evaluation team can, however, speculate regarding some of the points made in the status quo assessment which seem to need change or improvement if SOAR is to meet the challenges involved in its vision and strategy.

In the national context SOAR has up to now concentrated on PhD students and their supervisors within the field of organic food and farming. It does not seem that there are many PhD students working on organic food and farming available outside the universities and research institutions

covered by SOAR or DARCOF. If SOAR is to cooperate with other research schools at KVL it must develop some core competences of interest to other PhD students for instance regarding interdisciplinary studies. The evaluation team is not able to assess whether this is possible. The most pragmatic type of cooperation would imply a joint secretariat, but this might not be the most rational solution. If SOAR is itself to recruit interested post doc's or other researchers from Danish universities etc. then SOAR seems to need a stronger focus on attracting international capacities within a broader research field than only organic food and farming and/or international capacities well experienced in interdisciplinary studies.

Hence, to the evaluation team, growth in the international context should not be separated from national growth – it seems worth to combine them. Based on the current experience, growth in the international context cannot take place without much stronger alliances and cooperation than is currently taking place in the Scandinavian/Baltic context. Stronger exchange with research environments of similar size and at least same level of research competence than the Danish one seems necessary. SOAR has not been able to establish these contacts up to now, but it seems that SOAR has found a good way to contact and teach a broad range of PhD students originating in different scientific disciplines on identifying the basic principles of organic farming and include them in scientific analyses. To consolidate these capacities, however, imply a stronger integration of SOAR into KVL in terms of professorships etc.

Given the restrictions found in the financial sources used up to now, it seems worthwhile for SOAR to move in two directions, which need not be contradictory. One direction is to apply for contributions made by the organic food and farming industry. It is clear that the industry will profit from well educated researchers. It also seems that the research students will profit from stronger ties to organic food and farming industries and stakeholders than they have had up to now. The other direction is to look for European partners and make a joint application for instance for a Marie Curie grant. It became clear during the evaluation process that SOAR may find good partners in this endeavor in both Newcastle and Wageningen. An even broader international perspective including developing countries should not be excluded, but opportunities should be assessed similar to others i.e. whether there are possibilities for obtaining resources to cover all expenses necessary.

If SOAR is to exploit any of these directions, it is very important for the evaluation team to stress, that applications and scientific development demands resources in addition to those found available in SOAR today. SOAR is doing a good job in running the PhD school on the basis of the current funding, but it cannot be expected to find sufficient time and money within the existing budget to act properly when attempting to participate in the rather strong international competition for Marie Curie funding. Paid time is needed to adapt SOAR's model of teaching to an international mode, combine it with contributions from partner universities and to make seminars and workshops acceptable in the PhD educational system of other countries and *vice versa*, and travel expenses must be covered when networks and practical arrangements are to be prepared and consolidated.

In summary, SOAR needs to develop a strategy for further development. The strategy needs to be backed up by KVL in terms of positions, time and money if it is to have a chance to obtain funding from the two sources, which (apart from Nordic research funds) appear most attractive to the evaluation team: the organic food and farming industry and the international funds under Marie Curie programs for research and research education.

3. Assessment

SOAR is a research school located at the Royal Veterinary and Agricultural University (KVL) in Denmark and it has been active for three years. Half of the enrolled students work on other research institutions and several are enrolled for PhD degrees at other universities. This evaluation is done to assess whether SOAR has created an enabling environment where SOAR's goals are fulfilled and to suggest possibilities for improvements. The evaluation is done by 3 international peer researchers within the broad spectrum of disciplines covered by SOAR and one representative from the PhD study board of KVL. The basis for the evaluation is SOAR's statutes, annual reports, self evaluation report, as well as summaries of the three finalized dissertations available at the time of evaluation. In addition, the evaluation team has spent one day in Copenhagen interviewing selected PhD-students, supervisors and members of the scientific advisory board and finally the head of SOAR and the pro-rector of research at KVL.

The specifics of organic agriculture involve a need for research based on multifactor or integrated methodologies and approaches able to grasp and solve problems as implied by organic agriculture principles or practices or as defined by organic farmers. The evaluation team finds it clearly justified to establish SOAR as a research school specialising in organic food and farming. The status quo evaluation shows that SOAR has indeed created an enabling environment where SOAR's goals are fulfilled in the sense that SOAR reflects *a successful establishment of a national research network including both universities and sector research institutes*. The management and leadership of SOAR is excellent regarding this perspective, but international and interdisciplinary reality is lagging a bit behind the ambitions mentioned in statutes. The evaluation team finds it impressive that SOAR has reached its results within only three years. The status quo evaluation detected the following problem areas:

- a) International cooperation needs to be strengthened not least on the European level both on the institutional level and regarding stimulating PhD students' international activities.
- b) Need for stronger reciprocity with hosting research institutions and universities and with the organic food and farming industry/stakeholders regarding discussions of coping with interdisciplinarity and concrete problem areas.
- c) Broader recruitment among post doc's and other senior researchers with interest in organic food and farming research and turn attention towards international alliances regarding joint teaching of PhD students.
- d) Themes and activities of summer schools and seminars might be broadened to include scientific dialogue with basic ideas of mainstream sciences and discussions on how to cope with interdisciplinarity.

The assessment of the future of SOAR shows that SOAR cannot go on as it is. It needs to develop a strategy for alternative funding and further scientific development. The strategy needs to be backed up by KVL in terms of positions, time and money if it is to obtain funding from the two main sources which in addition to national and Nordic research funding appear most attractive to the evaluation team: the organic food and farming industry and the international research funding via Marie Curie programs.

Recommendations

The evaluation team has discussed many concrete proposals regarding ways to realize the ideas and proposals mentioned in the evaluation. The proposals are listed here. Most of them are mentioned and

given a motivation in the text above while the remainders are mentioned as supplementary ideas to realize the intentions.

- The existing structures function well and therefore need no radical changes. The most important mission of the research school is to provide an understanding of the principles and structures of organic agriculture. The level and extent (in terms of ECTS) of courses provided by SOAR is considered appropriate since it is essential that the students have space in their study programmes for discipline and method-specific courses which support their research projects directly.
- Summer schools could be associated with national and international meetings on organic farming. This would motivate a higher level of participation by students and supervisors, contribute to increasing the scientific aspirations and to obtain contact with the industry.
- It is an option to expand the remit of SOAR to include post docs and MSc students – perhaps in association with DARCOF.
- Internationalisation – the focus should be on Europe and Scandinavia due to identifiable funding sources. Note that the preparation of EU proposals (e.g., COST actions, Marie Curie networks) requires the investment of large amounts of resources in their preparation and execution. In other words, the institutions need to provide internal support to write them. It is essential to participate in these kinds of networks to retain competitiveness in the European environment.
- Danida and similar programmes on the EU level will provide opportunities for expanding to developing countries.
- The structure of advisory boards might be changed to include representatives from farmers' unions and the food industry, e.g. Arla, Danish Crown, aarstiderne.com. This might encourage financial involvement.
- The structure of advisory boards might be changed to include representatives from all universities and research institutions involved. This might encourage scientific involvement.
- Clear division of labour with DARCOF is needed to ensure better collaboration.
- Summer schools might be organised in ways that ease contacts to farmers and industry.
- Stronger scientific support of SOAR in terms of professorship(s).
- Resources for full participation for sector research supervisors needed to facilitate full supervisor participation as part of the external funding.
- Professional and popular dissemination of information of completed projects should be ensured. Perhaps DARCOF should take the leading role in providing the mechanisms and format, but SOAR should ensure that this happens.
- SOAR should be more visible in the KVL environment in relation to other research schools. Consider rationality of having a joint secretariat with other research schools.

Annex 1

Program for interviews in Copenhagen the 19th of January 2005.

Time	Arrangement	Place
9-10	Meeting with PhD students Chris Kjeldsen, Dorte Bodin Dresbøll, Bea Nielsen, Annette Nygaard Jensen, Maj-Britt Quitzau	Meeting room R322
10-11	Meeting with Supervisors Pia Frederiksen, Kostas Karantininis, John Hermansen	Meeting room R322
11-11:15	Break	Meeting room R322
11:15-12:15	Meeting with RVP members Erik Steen Kristensen, Stig Milan Thamsborg	Meeting room R322
12:15-13	Meeting with Henning Høgh-Jensen	Meeting room R322
13-14	Lunch	
14-16	Presentation of outcomes for pro-rector	pro-rector's office
16-18	Evaluation panel	Meeting room R322
18	Depart	

Pernille Kaltoft from the Scientific Advisory Board was interviewed by the team leader in a telephone interview the following day.

SWOT analysis of SOAR

STRENGTHS

- Bringing phd students interested in organic farming together and make room for discussions on the features of organic farming
- Exposing students to methods for and experience in interdisciplinary work (eye opener)
- Introducing discussions on principles and values in organic farming
- Creating a network between students and supervisors working with different aspects of organic farming
- Seminars on general topics such as supervision, learning processes and writing a thesis
- to collect all/many PhD-students that are working with organic agricultural items with different subjects
- Interdisciplinary
- Organic farming is a good theme / aim and should be easy to market to consumers, students etc.
- Membership obligatory for students which secure critical mass in network and participation in summer schools
- Good interdisciplinary courses that is finding an appropriate form
- Good mix of new ideas and “doing the job” in secretariat.
- Qualified applicants to announced stipends
- Good backup from RVP
- Attract interest from external students wanting to guest for limited periods (Baltic, Egypt). Such services can be expanded.
- Contributes with knowledge on basic values and principles within organic farming
- As all research schools: contributes knowledge on epistemological aspects of research
- Contain a combined offer: summer courses on basic concepts, ethical aspects and broader issues related to the research process and half year seminars with opportunities to present own research
- Presents many aspects of research related to organic farming to the students
- Informative web-site
- Networking between PhD students (sharing problems and so on)
- Improve competences at biannual seminars
- General source of information
- Strengthen interest for research in organic farming
- Broader perspective in PhD project
- SOAR serves as a good network for ‘organic’ students from a wide range of sciences, otherwise inaccessible through normal more specific training courses. Furthermore, seminars give a very good insight in ongoing organic research in DK
- C-funding of PhDs in relation to DARCOF with compulsory training in ‘organic disciplines’ helps to increase the awareness of the broad organic aspects, rather than just seeing DARCOF as another means for funding of own research
- It promotes the organic ideas and perspectives in research that except for an organic context is based on standard science methods
- All organic farming students ‘under one roof’ – high degree of diversity
- Solid management structure
- All research environments involved

- It has been relatively easy to recruit students, so SOAR now has an impressive high number of PhD students established within a 3 years' period
- The collaboration in SOAR is truly transdisciplinary
- SOAR has a well functioning secretariat and management

WEAKNESSES

- A lack of being able to (convincingly) demonstrate the benefits of working from a systemic and interdisciplinary way to the students and for the benefit of their current project
- Apart from the very general courses, the students will probably only to a limited extend make use of the insight gained in their phd project (but it will have a longer term impact)
- Students do not necessarily appreciate the wider goal of SOAR (fund are funds)
- Research areas are very different making scientific discussions difficult
- Summer schools take up too much time and ECTS from the total amount of courses
- It is a weakness that many students find that two summer schools are too much – maybe they are not interesting enough or similar?!
- to work together with students working with other subjects can also be a weakness, IF the school is too small and f.ex. only few people are working with organic husbandry, then the subjects in the students field can be to superficial – because organic farming is VERY wide and includes many different subjects
- it can be difficult to include themes from SOAR in its ph.d project
- Not the resources to be extravert and we have concentrated to get SOAR going. However, the network in EU is fairly large but are we “branded/competitive” enough?
- “Task-overloading” of head due to lack of support from organisation
- Future strategy badly needed – and has been so for the last year
- Very hard work to get the funding for students from Baltics, Magreb, Africa.
- RVP may need to be expanded to cover Danish or European Universities better
- The summer school wants to bring knowledge to students on the context of organic farming, i.e. relation to sustainable agriculture, a critical approach to principles, the societal context for organic farming and discussion of its role in society, interdisciplinary research. All valuable goals but students and supervisors have to some extent other aspirations (focussing on research objectives, methodologies etc) Challenge: to close the gap between aspirations, and set expectations on a proper level.
- Not interdisciplinary enough (mainly KVL)
- Difficult to combine natural and social sciences
- Small selection of offers (e.g. courses etc.) – little variation
- Too few students with similar subjects, this limits the possibilities to discuss your ‘new organic knowledge’ specifically related to your own research area, which would improve the ‘take-home-message’ and applicability in daily work
- The very different backgrounds of the students requires a big effort to close the gap between students experienced and non-experienced within the interdisciplinary research, to ensure good communication and that the un-experienced don’t ‘get lost’ without compromising the expected high level/quality of the training
- For DARCOF/SOAR co-funded PhD projects, much of the required documentation for SOAR, e.g. status reports may seem as time consuming double work. Perhaps a more careful evaluation of what is necessary and what is superfluous is needed
- The diversity of projects results in difficulties in provision of courses of the needed depth and breadth, and in difficulties of creating a corps d’esprit
- Discrepancy between own PhD project and the courses in SOAR – lack of coherence

- Logistics – 8-10 institutions (e.g. foreign lecturers – where should they lecture?)
- Integration of supervisors in the work difficult due to lack of time / students in several different Research Schools (universal RS problem)
- The inhomogeneity of students makes it difficult to make courses and summer schools at high academic (disciplinary) level
- The institutional back up from the hosting institute (KVL) and other participating institutes and universities is relatively weak
- The European and global formalised educational network is relatively weak

OPPORTUNITIES

- Learn from summer school 2004
- Include courses which improve the students' formal competences in performing interdisciplinary research (tools etc.)
- Maybe stratify courses according to the stage of the students
- The opportunity to ensure that future researchers in organic farming know and have reflected on the values and principles of organic farming
- The opportunity to be a platform for future interdisciplinary projects
- The opportunity to be more international, attracting students and lecturers from other countries
- the only place, where students working with organic agriculture can meet and discuss
- the broadness of “organic farming” from ethical issues to plants and soil and animals means that SOAR has the possibility to be involved in a huge part of areas, human, journals and so on
- to give something else to the students, that they can not find anything else
- Organic farming is expanding worldwide and research education is needed
- SOAR is only “organic” research school on the market
- Head participate in good networks in EU and global. NATURA network could possibly be utilized.
- Head is increasingly recognized by Danida and organic farming is slowly getting Danida's interest.
- EU action plan may to some extent lead to opportunities
- Denmark has a high profile on organic research
- New EU member-states may well look for partnerships- Lithuania and Slovenia are two examples which we have cultured, and we have had good participation from the Baltics at our Summer Schools
- We have very good links to the organic scientific movement in Egypt. One Student already at SOAR, and another will be a guest for 1 yr.
- Internationalisation of study programmes in Denmark and in EU (Bologna)
- Change rules so that only one summer school is obligatory
- Closer collaboration with European institutions
- Support exchange students
- Seek funding for attaching supervisors closer – e.g. by attachment to the summer school preparation and implementation (supervisors often does not have a discussion forum on the SOAR issues, but they cannot allocate time without resources)
- Seek collaboration with the leadership of research institutions – make them fund 2 weeks/year for supervisors' participation in such activities.
- Make a web-site that supervisors also can use – e.g. update on conferences etc. (I have no idea of how resources are available at secretariat)
- International cooperation / expansion
- Utilisation of former SOAR students (interest and engagement)

- Involving more universities
- A 'united' school for organic research can help to address shared problems and enforce demands/influence on the PhD education
- SOAR enhances the connection to other research groups; this may facilitate and strengthen cooperation in future projects
- It can also help to market organic research and make it more visible (accepted)
- Role model for international collaboration
- Merge into a larger framework (national/internationally)
- Involved in 3rd World Organic Farming
- Increased focus on research education in Denmark
- Increased interest in society for transdisciplinary research
- Increased international focus of research and education

THREATS

- The idea of not supporting full stipends (but rely on other matching sources for funding) may counteract the student possibilities in taking advantage of the insight gained in SOAR in their projects, and this may impair the reputation of SOAR
- Time constraints in studies make students less ready to involve in SOAR activities
- Projects using organic farming funding for doing conventional research
- Unengaged students and supervisors
- Other more subject specific research schools
- that the amount of money given for the research in organic farming is too small that the School can have a "good" size (resources)
- the broadness
- that people prefer the "technical background" of their PhD project
- KVL has no strategy for research schools although KVL seems to continue to co-fund
- Poor linkage to industry – we have not tapped their resources
- Fragmented world outside DK which will take resource to hook
- Research educational structures differs much
- Many other research schools in Denmark now (total of 72) so funds for stipends are very competitive
- A stipend programme for Students from LDC would be a good opportunity but currently the hope is just green.
- Lack of funding
- Lack of ownership among PhD students and supervisors (especially those not attached to organic research environments)
- Decline in interest in organic farming
- Funding problems
- Bad composition of students' projects (e.g. too similar or too different)
- If too few students the network becomes non-coherent, it will not be self-sustained and the positive synergy effect is at risk of dying off
- Should improve 'selling the vision for SOAR' to increase the commitment among researchers not specially attached to 'organic', as high demands on research output may cause a reluctance to allocate time for these additional organic aspects
- Lack of basal funding (competition in future) – how to secure it?
- Lack of students (post doc 'problem' due to maturity in the research environment)
- Balance between loose structure and lack of profile
- Change in recruitment procedure – no longer 'forced' into SOAR through stipends

- RS nor so popular at KVL
- Increased competition from disciplinary research schools
- Less interest from students and participating institutes
- Less interest in society for organic food and farming

In General:

There are three items with importance:

- 1) Inter-disciplinary / Broadness
- 2) Resources
- 3) A good “theme” that should be easy to “sell” but that can be difficult to include in the scientific area

These 3 items both are strengths and weaknesses.

S and W:

- Related to a discussion of the necessity of students to relate to the organic movement – relating to its ideas, values and principles.
- It is not a “stand-alone” school – much work will have to be done looking for other courses, as the school cannot help students to find courses within their own discipline.
- Attitudes among students and supervisors to the content of a PhD: the school does not have an attachment to a specific research plan, paradigm, discipline or faculty, which may imply that students feel it too peripheral terms of their own research to –* not possible to focus on methods and quality improvement related to specific disciplines, interdisciplinarity is not an actual interest of students who are expected to do research on their own.
- The content of courses seem too broad and non-relevant to students (but it is in my view a question of changing attitudes towards research education)
- Weak link to supervisors (may not be in terms of time, but more related to perception)
- No “service” to supervisors on web-site, such as : how do you get funding for a PhD nowadays.