How to strengthen the link between advisors and research in a privatized advisory system? – The case of Brandenburg, Germany

Ulrike Knuth¹, Andrea Knierim²

Abstract: Agricultural advisory systems are mentioned as one important partner in the European Innovation Partnership (EIP) 'Agricultural Productivity and Sustainability' and therefore new funding opportunities for private advisory firms become available. Consequently this requires from advisors to adopt new roles such as intermediaries, (knowledge) brokers, (process) facilitators or change agents, e.g. in research – practice networks. Studies of the last decades in Brandenburg observed fragmentation within the AKIS, especially among advisors, but also disconnected linkages with research. Privatization and commercialization of advisory services to the full amount and shortening of budgets for regional agricultural research are main reasons.

These observations motivated the authors to start an action research process together with advisors working in Brandenburg, which aims at searching for new ways to intensify the collaboration between scientific organizations and advisory services in Brandenburg. The action research process will include the phases of problem analysis, planning, implementation and evaluation closely related to the management cycle, but they are to be adjusted as the process continues.

So far, the kick-off meeting with interested advisors has been realized and delivered insights on how advisors view the regional research system and its interaction with practice. In general, the advisors assess the situation as "research in Brandenburg is almost invisible". In particular, they noticed, that linkages among actors from the organic farming context are more intensively compared to conventional farming "actors". The implementation of EIP has not (yet) been received as a chance for future activities and has been viewed quite skeptically, especially concerning the advisors' role within operational groups. The participating advisors concluded a strong need for more networking activities within the group of advisors (self-organization) and defined it as a topic to tackle in following meetings of this action research process.

Keywords: interface, agricultural innovation system, linkages, action research, privatization, advisor

¹ Leibniz-Centre for Agricultural Landscape Research, Institute of Socio-Economics, Eberswalder Straße 84, 15374 Müncheberg, Germany.

² University of Hohenheim, Institute of Social Sciences in Agriculture. Department of Rural Sociology 430a, 70593 Stuttgart. Germany

Introduction

The issue of knowledge transfer and innovation receives increased importance as part of the current reform of the common agricultural policy and the common research policy in the EU in order to support sustainable development and to meet the upcoming challenges, such as climate change or biodiversity losses. With the establishment of the European Innovation Partnership (EIP) "Productivity and Sustainability in Agriculture" at European level and its implementation at national and regional level from 2014 through, inter alia, operational groups there is a clear "line of approach" towards networking and collaboration between science, practice, policy and guidance. Although the detailed design at the national and regional level is still open, it is clear, that agricultural advisors are to play a key role.

This "marching order" from Brussels meets a fully privatized advisory system since 2001 on in the German federal state Brandenburg. The advisors accordingly, exclusively focus on issues with which they "make money". Networking and cooperation among the advisors as well as interaction with research institutions and scientists has not stood in first place if it was not directly affect revenues for the consulting firm (Knuth & Knierim, 2013). Nagel (2002) had already predicted this development. Further, the public regional research sources had to undergo severe budget shortenings during the last ten years.

A recent example for science-practice collaboration for innovations in agriculture gives the innovation network for Climate Change Adaptation Brandenburg Berlin (INKA BB). In INKA BB farmers and other actors in the agricultural sector cooperate with agricultural scientists with the aim to ensure the sustainability of land and water use in the Brandenburg region under changing climate conditions. A crosscutting strategic objective is to hereby empower actors in business, administration, public agencies and civil society to proactively react on the emerging climate change with strategic flexibility (Knierim et al., 2009). In this project, joint learning processes are to be initiated, knowledge on climate change is to be distributed, discussed and reflected in order to develop and try out adaptation measures and lead the successful measures in the stabilization. Interestingly, almost no agricultural advisor has actively participated in INKA BB. Obviously there are good reasons and hindering factors that prevent advisors from this type of cooperative engagement. However, at the same time there are advisors who are interested in stronger linkages as the following quotation of an advisor in Brandenburg indicates: "we need a stronger networking in Brandenburg, the few existing capacities [regarding knowledge production and transfer) Brandenburg must be better connected [...]" (personal communication 2013).

The target of generation and diffusion of innovations in the EIP is closely linked to the ,Agricultural Knowledge and Information System' (AKIS) and the 'Agricultural innovation system' (AIS) concepts, which evolved from the criticism on the linear ,Transfer of Technology' approach. Agricultural advisors are to play a key role in both systems, in newer publications mentioned as 'facilitator', 'intermediary 'or' knowledge broker' (Klerkx et al., 2012) Cristovao et al 2012). Whether there is a sufficient number of advisors who are willing or capable to fulfill such roles in Brandenburg has been questioned by the authors (Knuth and Knierim, 2013).

A distinction between 'science-driven' research and 'innovation driven research' is advocated by the European Union Standing committee on Agricultural Research (SCAR) in its latest reflection paper. "By taking this difference in motivation into account, research policy and management could be improved" (EU SCAR 2012:7). They further conclude "networking and cooperation between research and extension or farmers groups is crucial and to be promoted" (EU SCAR 2012:7).

This problem situation in the agricultural advisory services in Brandenburg and in INKA BB in combination with the outlined theoretical and political background points the authors to a discrepancy between theoretically as well as politically envisaged networking activities and regional

conditions for this. From this tension the authors ask "How to strengthen linkages between research and extension in a privatized advisory system such as Brandenburg?" and initiated related to this question an action research process, which first targets advisors, who are interested in such a change process.

This paper presents first insights from the kick-off meeting of this action research process, particularly with regard to i) how the advisors perceive the research system in Brandenburg, ii) how they view the implementation of the EIP and iii) which ideas they have for improving their linkages to public research institutions.

Theoretical Framework

The underlying framework of the described action research approach is related to the current systemic approaches to Agricultural knowledge flows and innovation: i) agricultural knowledge and information/innovation system (AKIS) and agricultural innovation system (AIS). Both concepts developed as a critique towards linear models of innovation.

AKIS and AIS show knowledge flows and interactions related to innovation

As the starting point of the action research being conducted is the perceived need for improvement of knowledge flows among many different actors (research, education, administration), the AKIS concept with its focus on linkages and interactions between a variety of actors is chosen. Röling (1990:1) defined AKIS as "a set of agricultural organizations and/or persons, and the links and interactions between them, engaged in such processes as the generation, transformation, transmission, storage, retrieval, integration, diffusion and utilization of knowledge and information, with the purpose of working synergistically to support decision making, problem solving and innovation in a given country's agriculture or domain thereof". Later definitions such as published by the World Bank (2012:630) focus more on the interaction between the actors of the system⁸⁰.

The development and implementation of the European Innovation Partnership is mainly based on the 'Agricultural Innovation System' concept (AIS), which is defined by Hall et al. (2006:vi-vii)) as "a network of organizations, enterprises, and individuals focused on bringing new products, new processes, and new forms of organization into economic use, together with the institutions and policies that affect their behavior and performance. The innovation systems concept embraces not only the science suppliers but the totality and interaction of actors involved in innovation."

According to Klerkx et al. (2012:463) both concepts developed rather parallel than consecutive; AKIS evolved from the extension perspective, while AIS was developed form a research perspective. Labarthe et al. (2013:5f) identify two views on the coexistence of the AKIS and the AIS concept: "either as competing notions, or as complementary notions built for different aims. For some authors (e.g. Dockes et al. 2011) AKIS and AIS correspond to competing approaches, and only one should be kept. In this normative view it is argued that a new vision of AIS is needed to tackle the issue of sustainable development of agriculture....For other authors, each of these coexisting approaches place emphasis on a specific dimension of the reality, follows its own objectives, and each of them yield evidence that may be combined for the practice (Hall et al. 2006, (Klerkx et al., 2012)".

Knowledge brokers to support interactions within AKIS and AIS

In relation to both concepts the role of the innovation intermediary or systemic facilitator is described to become more important (Klerkx & Leeuwis, 2008) and refers to functions which are

⁸⁰ "Agricultural knowledge and information system (AKIS) indicates a system that links people and institutions to promote mutual learning and generate, share, and utilize agriculture-related technology, knowledge, and information. The system integrates farmers, agricultural educators, researchers, and extensionists to harness knowledge and information from various sources for improved livelihoods. Farmers are at the heart of this knowledge triangle. (World Bank, 2012:630)

not yet fulfilled in in Brandenburg. Klerkx and Leeuwis (2008:262) describe three main functions of such intermediaries: i) demand articulation, ii) network brokerage and iii) innovation process management. "These systemic intermediaries act as innovation brokers, whose main purpose is to build linkages in AIS and facilitate multi-actor interaction in innovation" (Klerkx et al., 2012)

Koutsouris (2012:68) argues with regard to the role of extension within an Agricultural Innovation System: "A major role of the new extension is that of the co-learning facilitator (...) aiming at the development of shared meaning and language between dialogue partners in order to stimulate change and develop solutions in innovation."

Kick-off meeting for the Action research process

Perceived deficits in the agricultural knowledge flows in Brandenburg induced the authors to become active as action researchers with the objective to investigate and pro-actively engage for an improved situation. This Action Research is understood as an approach aiming at supporting change and learning processes. The research process follows a cyclic and iterative approach repeating the four steps of planning, acting, observing and reflecting (Reason & Bradbury, 2008). The first cycle has been the kick-off meeting with advisors, who are interested in changes at the interface of research and advisory services. The action research process is to include the phases of problem analysis, planning, implementation and evaluation closely related to the management cycle, but they are to be adjusted as the process continues.

In the following the term 'researcher' refers to one of the authors, who facilitated the kick-off meeting.

Hypotheses before the Kick-off Meeting

The following hypotheses were the basis for the planning and reflecting of the Kick-off Meeting: i) An interface⁸¹ between the research system and advisory system exists but interaction activities are rare; ii) There are advisors who are interested in the improvement of knowledge flows in Brandenburg and willing to become active and capable to formulate first ideas on how; iii) The implementation of the European Innovation partnership related to Agriculture in Brandenburg is interesting for the advisors.

Planning of the kick-off meeting

The program of the kick off meeting included three main steps:

- i) to collect experiences with and views on the cooperation between agricultural research instutions and advisors and other agricultural actors in Brandenburg including an input on the transdisciplinary research project on climate change adaptation in Brandenburg (INKA BB)
- ii) Introduction of the European Innovation Partnership "Agricultural Productivity and sustainability within the rural development plans for 2014-2020 and a short discussion on chances for Brandenburg's advisors within this framework
- iii) Exchange of first ideas how to improve linkages between research and advisory services.

The workshop finished with a discussion on how to cooperate among each other in order to plan next steps to realize some of the advisors' ideas for improving the knowledge flow in Brandenburg.

⁸¹ The following activities are understood by the authors as part of a well-working interface between research and advisors: transdisciplinary research projects, information events by research institutions, where advisors are invited; publications of latest regional research results easily available, institutionalized exchange between advisors and research actors on regional research needs

Since there is no public database on all agricultural advisory firms in Brandenburg, the author developed her own out of an unpublished list of the regional Ministry of Agriculture and a published list of certified "cross compliance" advisors, which does include app. half of all advisors working in Brandenburg. This list is continuously edited and filled with new current information where available, mainly from an internet research, where 40 out of 52 firms present their firm. This list was the basis for a short quantitative analysis combined with a literature review on the current characteristics of the advisors active in Brandenburg (ch. 4.1).

All advisors (129 from 52 advisory firms), who were known to the author by then and documented in a database, were invited by Email to a workshop in June 2013. This invitation included the problem background, the above mentioned objectives of the workshop and the motivation and background of the author to initiate this cooperation with private advisors in Brandenburg. A number of 22 advisors showed interest in such a workshop, eight were ready to participate. Due to health reasons the workshop had to be cancelled with short notice and was postponed to August 2013. Then, 16 advisors replied showing interest in the workshop and six advisors participated. Overall 27 advisors showed interest in the topic and workshop.

The workshop was facilitated and documented through audio taping, personal minutes/memo reviewing the atmosphere and the role of the author as a facilitator. The audio tape has been transcribed and is used for a qualitative content analysis. Furthermore, foto documentation exists of the continuously visualized discussion results with the advisors by the researcher.

Preliminary findings

Characterization of the advisors in Brandenburg and the workshop participants

All advisory firms (52), who were known to the author by then, were invited by Email to a workshop in June 2013. The analysis of the current characteristics of the advisory firms with a web page revealed, that most firms are specialized in farm economics, business management and financing. Six advisory firms (11%) are specialized in organic farming. The largest firm employs about 30 advisors in ten regional offices and has roughly 1000 clients. The main partners of this company are the Farmers' Association of Brandenburg (*Landesbauernverband*, LBV) and other agriculture related associations. The remaining consulting companies are mostly smaller, with the number of employees ranging from one to 19 people. Ten out of the 52 firms come from neighbouring federal states and have clients across different federal states (mainly East Germany). 23 advisory firms addressed are certified for "Cross Compliance advice" by the Ministry of Agriculture in Brandenburg.

Clients of advisors in Brandenburg are rather larger farms (with six or more employees) as well as other agriculture related groups, e.g. state and rural district authorities and associations involved in rural development planning, agricultural contractors, and, recently new actors related to renewable energies (esp. biogas) (Knuth and Knierim, 2013).

Half of the six advisors, who finally participated in the kick-off meeting, are specialized organic farming advisors, two out of them coming from organic farming associations. Two of all advisors come from other federal states (Saxony, Saxony-Anhalt). This was quite helpful in the meeting as they could also include their "outside" experiences and often compared the Brandenburg situation with theirs by asking the respective questions. Four advisors come from rather large advisory firms with more than 15 advisors working in their firm. Personal feedback from advisors ahead of the Kick-off meetings confirmed the authors' expectations why advisors are not participating in such a process; mainly fear of competition and therefore loss of knowledge and lack of time for meetings with no direct profit effect.

Experiences with and views on the research-advisors interface

In general, the advisors assess the situation as "research in Brandenburg is almost invisible". Later in the discussion they pointed on positive exemptions such as research institutions, e.g. the "Eberswalde University for sustainable development" (www.hnee.de) or a research institute for agricultural technology (ATB), they experienced as quite helpful and cooperative.

They further observed, that "good practical relevant publications come rather from other federal states in Germany than Brandenburg, e.g. the chambers of agriculture. Why is this so?" they asked. One advisor coming from Saxony described in this context the well-working cooperation between research and advisory services in a regional research institution (Landesamt) there, where "public regional research had the task to produce the knowledge basis for public advisory services. There was intensive knowledge exchange and regional problems were tackled by the researchers. Now it changed when public advisory services were privatized. The "Landesamt" now runs for money from external research programmes which do not necessarily relate to the knowledge needs of the region".

In particular, they noticed, that linkages among actors from the organic farming context are more intensive compared to conventional farming "actors". Here they mentioned again the Eberswalde University, which developed a network of organic farmers, which is used to transfer knowledge needs of farmers into the University, which are to be dealt with by graduate students or small research projects. The advisors discussed about the reasons and explained it with less distrust and the mentality of organic farmers in this "niche community": There it is no problem to say to a farmer with a certain problem: here is the address of so and so, go there, say hello from me and have a look. This I can seldomly say to conventional farmers. There you cannot even say the neighbor is also your client..." (an advisor who works with conventional and organic farmers).

The advisors also criticized trends within the research system: i) the trend towards short-term projects, which - according to the advisors - hinders the researcher to become an expert in a certain field. Generally they say:"long term research is good for the interface". Another advisor had the impression, that there is not enough on-farm research in Brandenburg, which transfers innovations from research into the real world.

The advisors' view on EIP

The instrument(s) related to EIP in the new EU policy for rural development has been known by one advisor out of the six participants. This one is not from Brandenburg and just recently switched from research to consultancy. He even was familiar with the EIP structure, as he has applied for a focus group. The EIP approach has been viewed quite sceptically and distrustful at the time of the meeting. They expect "that the same people like always will be able to apply for the money and receive it" and that "new topics or new actors won't have good chances". One even called it a wrong approach, another advisor states: it won't help to minimize the deficits that came up because of the withdrawal of public support [at the interface]. The main deficit they see for successful EIP activities is the missing institutional setting for good linkages within the AKIS in Brandenburg. "Other federal states, especially lower Saxony⁸² will benefit from this new instrument, as they have their working groups already in different regions and meet on the next level. They have this basic infrastructure, which will lead to such [operational] groups. And this structure would have to be built here first."

Further the advisors' role within operational groups and its capacities to participate was questioned: What can an advisor supply in such an operational group? Is he or she just an observer/bystander? How can he receive access to such a group? [...] But overall this is only a small part of my daily work. And then I have to consider, that I need quite some time in advance to es-

⁸² Lower Saxony has a chamber of agriculture for applied research and advisory services, different topic related knowledge centers (e.g. organic farming or grassland) integrating advisors, researchers and topic related associations. Additionally there exist private advisory firms. The state government is quite active in supporting knowledge exchange activities.

tablish all that, which again needs time and money. And this is for me the main question from the advisors' view."

First ideas of the advisors how to improve linkages

The participating advisors as well as 12 advisors, who replied to the invitation, but could not participate on that date, showed interest in the topic or even articulated explicitly a strong need for improvement along the interface. "We need a stronger networking in Brandenburg, the few existing capacities [regarding knowledge production and transfer) Brandenburg must be better connected [...]" (# personal communication with an advisor in Brandenburg, June 2013).

Repeatedly during the workshop, they called for improved information sources, such as a database for regionally relevant research results, or a calendar highlighting information events of all research institutes which present current research results to practice actors. Nevertheless, they pointed out the problem of advisors in overviewing only a limited amount of information sources and therefore are interested in a good regional overview which links such information. Further, one advisor articulated his interest in support for understanding and interpreting scientific publications.

The advisors in the workshop further concluded a need for more networking activities within the group of advisors (self-organization) especially regarding their articulation of knowledge needs. Nevertheless, two advisors saw this quite skeptically: "For this we are way too much individualists [...] The ministry once tried to initiate a working group on advisory services. But you go there once or twice and then you see, you have to invest time and work and then you don't go there anymore". Here a fear of competition and limited resources became obvious once more. Further the advisors discussed the option to communicate their knowledge needs to the "Brandenburg Agricultural Academy" – a semi-public educational institute, which offers advanced trainings for advisors as well as farmers.

Discussion along the hypotheses

i) An interface⁸³ between the research system and advisory system exists but interaction activities are rare.

In the context of organic farming it appears, that certain cooperation activities between research and advisory services exist, but in general could be improved. In the context of conventional farming, one could doubt that there is an interface between advisors and regional research institutions, because the advisors mentioned to rather use information sources from other federal states, e.g. chambers of agriculture. This let the authors assume, that the few research activities in Brandenburg's public research institutions are either not sufficient or not relevant for the practice or in case they exist they are not well communicated and distributed to farmers and advisors. It further lets the authors assume, that communication about knowledge needs of the farmers and advisors does not exist. The observation of budget shortening and privatization within/of state agricultural research institutions strengthens this view. The trend towards scientific excellence measured mainly by peer-reviewed publications might worsen the situation.

ii) There are advisors who are interested in the improvement of knowledge flows in Brandenburg and willing to become active and capable to formulate first ideas on how.

⁸³ The following activities are understood by the authors as part of a well-working interface between research and advisors: transdisciplinary research projects, information events by research institutions, where advisors are invited; publications of latest regional research results easily available, institutionalized exchange between advisors and research actors on regional research needs

The participation in the kick-off meeting of six advisors out of approximately 100 out on the market was number wise quite low, but the atmosphere was quite cooperative and the advisors truly showed their appreciation at the end of the meeting about this chance to get to know colleagues and exchange views and experiences among one another. They came because they were interested in the improvement of knowledge flows and all actively participated in the discussion and offered their cooperation for future activities. The additional 12 advisors who could not participate on that date, but answered the invitation and therefore showed to be interested in this topic motivate the authors to continue the Action Research process.

iii) The implementation of the European Innovation partnership related to Agriculture in Brandenburg is interesting for the advisors.

The kick-off meeting did not give a lot of information about the advisors' view on EIP, mainly because it was new to most of the participants. Nevertheless, it left the impression, that overall the implementation of EIP in Brandenburg has not yet been received as a chance for future activities by most of them. Their main concern related to the low level of existing networking activities in Brandenburg – the missing infrastructure- so far and the distrust towards the policy makers to organize an open process is not surprising for the authors. The question of the advisors which roles are advisors to play in operational groups could be one to be discussed more detailed in the later action research process.

Conclusion towards next steps

The kick-off meeting showed, that there is i) a strong need of the advisors to receive more information on the research system of Brandenburg (topics, information sources, contacts) and ii) a more ambivalent desire to cooperate more between the advisors themselves.

An option for better information sources is to extend the regional internet platform "isip" with more information from regional research institutes — information events, field days, new transdisciplinary projects that search for partners. Concerning the cooperation between the advisors, a next meeting, which includes advisors, researchers, and agricultural educational institutes, could motivate advisors to meet again and discuss their situation, if it also includes further information on the research system in Brandenburg. There, research institutions could give an overview of their current work within their organization and the meeting could also include working groups that discuss the question of how to improve knowledge flows e.g. by extending the "isip" platform or intensifying the exchange of knowledge needs of knowledge offers of the "Brandenburg Agricultural Academy" and other regional agricultural educators.

Further, there are questions that need to be tackled theoretically, e.g. which organizational models do exist for cooperation between advisors and research? Which factors promote or inhibit cooperation/knowledge exchange between advisors and research with special focus on a privatized advisory system (existing networks (related to trust and who knows whom?), financial incentives, innovation brokers)? Which factors have most influence?

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