Agri-environmental advisory services in pluralistic AKIS in the EU - an analysis framework for governance structures

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Abstract:

Great challenges regarding biodiversity conservation, water protection and sustainability are increasingly important in agricultural funding und regulations. As such, knowledge exchange, learning and innovation are crucial aspects of current EU funding for rural development. Funding for advisory services dealing with these challenges exists, but first evaluations concluded that the delivery of the knowledge transfer and advisory activities was not sufficient relative to the measures' importance and the expected outcomes for such activities . From a governance perspective, the objectives and organisational features of advisory programmes are crucial elements to be considered when designing advisory programmes related to agro-environmental advice. The objectives and organisational features of such advisory programmes have mainly been studied at the case-study level; comparative analyses on EU level have not been found. Here, we present a conceptual framework for investigating governance structures of agro-environmental advisory services in the EU with a special focus on coordination aspects in privatized advisory systems. To develop this framework, an overview of theories and concepts is provided, which are related to 'agri-environmental advisory programmes' and particular attention is given to governance structures and coordination aspects. The IFPRI framework for designing and analysing pluralistic agricultural advisory services (see Birner et al. 2006) and the framework of Vatn (2015) for environmental governance structures are theoretical bases for the analysis framework and is further adapted to the specific characteristics of agro-environmental advisory services. The framework, briefly tested with two German cases, is helpful to differentiate actors according to their organisational background and their roles regarding coordination tasks.

1. Introduction

Agri-environmental schemes and the implementation of agri-environmental measures 'on the ground' have become a crucial policy instrument to work towards environmental goals. Successful implementation of agri-environmental measures is closely linked with farmers' access to knowledge, their sensitization to environment-related problems in agriculture, and the development of farm-specific solutions. Knowledge transfer activities and advisory services for agri-environmental innovations are key elements of EU rural and agricultural policies that aim to tackle the global challenges of biodiversity conservation, water protection, and sustainable farming. These policies make up one priority of the current Common Agricultural Policy (CAP) (Regulation (EU) No.1305/2013; van Uden (Ed.), 2012). Funding exists for advisory services regarding those challenges since a 'Farm Advisory System' (FAS) was to be installed in each Member State by 2007. Furthermore, the recent CAP

reaffirmed and extended these funding possibilities (European Union, 2013). However, a recently published audit by the European Court of Auditors, which examined the provision of knowledge transfer and advisory activities co-funded through the EU budget for Rural Development (EAFRD), "*found that the delivery of the knowledge transfer and advisory activities was not sufficient relative to the measures' importance and the expected outcomes for such activities"* (ECA, 2015:06).

From a governance perspective, the objectives and organisational features, in particular regarding coordination aspects of advisory programmes are crucial elements to be considered when designing advisory programmes related to agro-environmental problems. Objectives of policy-makers for agri-environmental advisory programmes are important as advisors in such programmes have the specific difficulty to convey innovations related to environmental-friendly production practices because they often have to interlink conflicting interests of the contracting authorities and the farmer (Hejnowicz et al. 2016). Organisational features, and herein esp. the coordination mechanisms, are assumed to be relevant for the success of advisory programmes, because advice providers in EU member states are not only public actors, but increasingly are actors from the private sector and farmer-based and non-governmental organisations, especially in the field of agri-environmental advisory services (Sutherland et al. 2013). Additionally, environmental and agricultural issues are often handled by separate public authorities in each region who together are responsible for designing agri-environmental advisory programmes. This requires cooperation and communication between the authorities for well-working agri-environmental advisory services and this is not always the case.

Internationally published peer-reviewed studies on different aspects of such advisory services mainly exist at the case-study level (e.g. Atari et al., 2009; Ingram, 2008; Klerkx et al. 2006; Manderson et al. 2007). In the Netherlands, Klerkx et al. 2006 investigated a complex government funded support service for 'Nutrient Management'. They questioned some of the conceptual and practical assumptions of such interventions, and proposed that it may be more effective and efficient for governments to build more permanent institutions to facilitate the development of the agricultural knowledge market rather than to invest into voucher systems. Klerkx and Jansen (2010) elaborated on how to support private advisors in addressing sustainable farm management issues in their regular service contacts and found out, that effectiveness depends on an adequate mix of, and balance between, pull (stimulating farmers' advice demand) and push measures (building capacity of advisors) .

In Great Britain, Ingram and Morris (2007) investigated the nature and extent of agri-environmental knowledge (soil best management practices) of agricultural advisors. Ingram (2008) had a closer look at knowledge exchange mechanisms, particularly 'encounters', between advisors and farmers in England; and Sutherland et al. (2013) evaluated the establishment of trust between advisors and their clients in agri-environmental advisory services. Just recently, Vrain and Lovett (2016) studied advisory services related to agri-environmental measures in four different regions in Great Britain to understand the role of advisors in the uptake of measures on farms. An analysis of the agricultural advisory systems in the Netherlands and France with regard to 'multifunctional agriculture' is analysed by Labarthe (2009) by combining a historical institutional analysis and a network analysis.

Additionally, nationally published (evaluation) reports are available, e.g. for the German water protection advisory services (Techen et al., 2015) or Cross Compliance advice (Knierim et al., 2011). The question of how to integrate water issues into the ‚Farm Advisory System' within the Member States was extensively discussed in a workshop on EU-level in Brussels in 2010. Results of the discussion are reported in a handbook for public authorities (Berglund and Dworak, 2010). The EU project SOLINSA investigated in eleven European countries the network approach for enhancing sustainable agriculture (Hermans et al., 2015 and www.solinsa.org).

Agri-environmental advisory services are closely related to public agri-environmental schemes (AES) and its pre-defined measures, which are implemented by participating farmers or land managers. But how exactly are advisory services related to AES, to which extent? Are AES measures only the content of advice without institutional connection to the AES (e.g. Biodiversity advisory services in many German states) or is advisory service provision part of the scheme (e.g. Natural England's Environmental Stewardship programme in Great Britain; Hejnowicz et al. 2016), and how does this influence farmers' participation in AES? Such questions need to be explored more explicitely. Studies on the implementation process of AES (e.g. Hejnowicz et al., 2016; Juntti and Potter, 2002; Vrain and Lovett, 2016) rather deliver information on the role(s) of advisors in the uptake of AES measures, institutional relation of advisory services to AES is, if available, a side information not further investigated.

A conceptual framework for agri-environmental advisory programmes as such does not yet exist, but concepts and theories related to single aspects of agri-environmental advisory services exist. Sutherland et al. 2013 conceptualize trust in agri-environmental advice and information and several authors investigated farmers' environmental behaviour (changes) and interests as well as their influencing factors, e.g. by Burton (2014), Siebert et al. (2006), Atari et al. (2009); Taylor and Van Grieken (2015). The specific relation between advisory services and environmental behaviour has been just recently investigated for example by Chantre and Cardona (2014) and Vrain and Lovett (2016).

Relevant conceptual frameworks for advisory services and the way they are embedded in the broader national knowledge system include the *'Agricultural knowledge System (AKS)'* (Nagel, 1979), the *"Agricultural knowledge and information system (AKIS)'* (Röling and Engel, 1990 and 1991) and the '*Agricultural innovation system (AIS)'* (Hall et al., 2006). Birner et al. (2006, 2009) provided the framework: "From 'best practice' to 'best fit,'" a specific analytical concept for designing and analysing so-called 'pluralistic agricultural advisory services' as one important element of AIS, 'disentangling' systems of agricultural advisory services into i) governance structures, ii) capacities and iii) management and advisory techniques. The IFPRI framework was recently adapted by OECD (2015) for evaluating 'green growth initiatives in agriculture'. Comparative analyses of agri-environmental advisory services within the EU do not exist to the knowledge of the authors. Such analyses could provide commonalities of governance structures of successful advisory services in comparable AKIS settings especially regarding coordination structures and lead to guiding principles for designing agri-environmental advisory services. To conduct such comparative analyses with the aim of evaluating, for example, coordination structures of such advisory approaches, a conceptual framework is needed.

Objectives and a definition of agri-environmental advisory services

This paper presents an analysis framework for governance structures of agri-environmental advisory services. It has been developed to be used for a comparative literature analysis of German and English peer-reviewed and grey literature that investigates advisory services for agro-environmental advisory services in the EU with a special focus on governance structures and coordination aspects in privatized advisory systems. To develop this analysis framework, first an overview of theories and concepts is provided, which are related to '*agri-environmental advisory services'.* By compiling characteristics of agri-environmental advisory services they can be used to develop the above mentioned analysis framework for governance structures in agri-environmental advisory services.

Here, the provision of agri-environmental advisory services to farmers is understood as a public responsibility. Hence, we assume, funding programmes for agri-environmental advisory services are necessary that aim at enhancing environmental-friendly practices at farm level. Such programmes can be designed by public authorities (in cooperation with non-governmental actors), and advice will be

provided by all varieties of actors from public, private, farmer-based or other non-governmental organisations. Of specific interest are research questions like, what are the different actors' roles in the programme, how do they cooperate within the programme, and how does the design of such programmes influence this cooperation.

2. Concepts and theories related to coordination of advisory programmes

2.1 Agricultural Knowledge and Innovation Systems

Advisory services, today, are considered to be embedded in a larger national or regional Agricultural Knowledge and Innovation System (AKIS). Providers of advice, the main actors in agri-environmental advisory programmes, differ from country to country, or region to region. They are public, private or farmer-based organisations, or often are a combination of all three (Knierim et al. 2015). The AKIS concept becomes relevant when analysing objectives and organisational features (such as coordination aspects and the role of different actors) of agri-environmental advisory programmes. It aims at describing important actors for knowledge innovation processes and investigating the links and interaction between them. Intermediaries (Howell, 2006; Klerkx and Leeuwis, 2008; Schomers et al., 2015) and innovation brokers (Batterink et al., 2010; Klerkx et al. 2012; Koutsouris, 2012; Hermans et al., 2013) are new structural elements, being relevant for co-production of knowledge. The 'Agricultural innovation system' approach has been receiving growing attention in policies related to agricultural and environmental innovations (Röling and Wagenmakers (ed.), 1998; Wielinga et al. 2008) and led to funding e.g. innovation networks or operational groups within the European Innovation Partnership (European Union, 2013).

2.2 Governance structures in advisory services

Birner et al. (2009, for more detailed description 2006) provide a comprehensive framework for analysing and designing pluralistic agricultural advisory services as one structural element of Agricultural Innovation Systems (AIS). The authors of the framework find it not a promising strategy, to import standardized models, e.g. Train-and Visit approach in developing countries, even though they are viewed as 'best practice'. Instead they recommend building capacity among policy-planners, managers, and researchers to identify modes of providing and financing advisory services that 'best fit' the specific conditions and development priorities of their country or region (Birner et al. 2009).

Figure 1: "(From best practice to) Best Fit – Framework" (Birner et al. 2006)

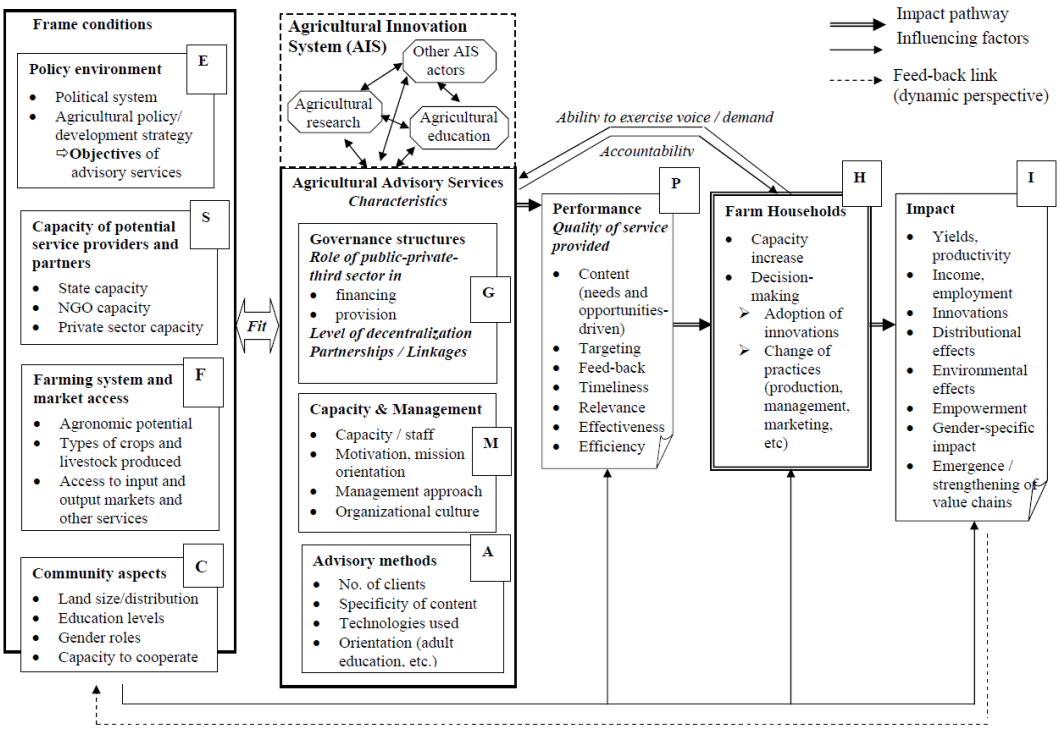

Figure 2. Framework for Designing and Analyzing Agricultural Advisory Services

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This 'Best Fit' framework disentangles advisory services into three main characteristic components as choice variables from a policy perspective: i) governance structures, ii) advisory organisations' capacities (staff number and qualification) and iii) management and advisory techniques. Additionally, the framework underlines 'frame conditions', to which advisory services have to fit. The frame conditions include the policy environment, the general capacity of potential service providers and 'farming systems and socio-economic conditions' (Figure 1). The framework also identifies further aspects to be analysed in relation to advisory services, such as the quality of advisory services, the farm households, and possible 'impact' dimensions. The research question regarding coordination structures of agri-environmental advisory programmes is closely related to governance structures of advisory services (Box G) within the 'Best fit' framework It is considered as one choice variable of *"fundamental importance in the design and reform of agricultural advisory services"* (Birner et al. 2006, p. 25). There the term refers to a variety of institutional options that exist for providing and financing agricultural advisory services, such as fee-based advisory services in or publicly funded contracts to private companies[1]. (). To analyse the appropriateness of different 'governance structures' for agricultural advisory services, Birner et al. point to Welfare and New Institutional economics and transaction costs theory (Birner et al. 2006, pp.32).

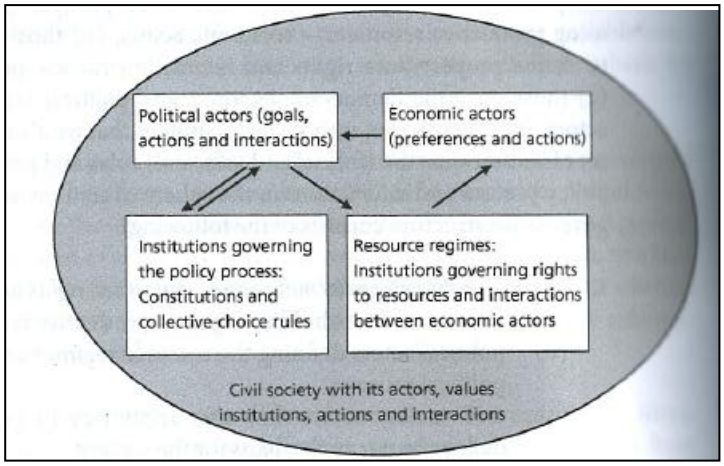
More recently, the term 'governance structures' has been described in relation to environmental governance as consisting of two main elements: i) actors - with their goals/motivations, capacities, rights and responsibilities and ii) institutions – facilitating interaction (Vatn, 2015, pp 143). Actors in

[1] Overall 18 options are listed by Birner et al. (2006, p.19) combining different providers and source of finance from the public, private and third sector (NGOs and FBOs).

Vatn's logic are differentiated into economic, political, and civil society actors. Similarly, the actors in governance structures can be separated into the public sector, private sector and third sector. In this case, third sector actors are separated into non-governmental organizations (NGOs) and farmer-based organizations (FBOs) (Birner et al., 2006, p 18; Labarthe et al., 2013; Knierim et al., 2015). Vatn (2015) described the institutions facilitating interaction between those three groups of actors as:

a) the resource regime: the rules governing the economic process including rights to resources and rules of interaction and
b) the rules governing the political process (constitutional and collective-choice rules[2]) and
c) the institutions of civil society. (see figure 2).

Figure 2: governance structure according to Vatn (2015:144)



3. Conceptualizing governance structures in agri-environmental advisory services

As stated initially, a successful implementation of agri-environmental schemes and the realization of agri-environmental measures 'on the ground' are closely linked with the access of farmers to knowledge, their sensitization of environment-related problems in agriculture, and the development of farm-specific solutions. In the following sections, the general conceptual understanding of governance structures in advisory services is specified for the conditions of agri-environmental advisory programmes.

3.1 Characteristics of agri-environmental advisory programmes

Agri-environmental advisory programmes tackle a variety of topics related to environmental health and sustainability of farming. The objectives and therefore content of agri-environmental advisory services are either determined by the environmental problem, often biodiversity losses or water pollution, or by the farmer's 'problem', often related to legal requirements for farming or voluntary certifications. Agri-environmental schemes and measures could be considered as the area of overlapping both interests, as they are currently one political instrument to solve environmental problems related e.g. to biodiversity or water quality. Supporting the farmer in choosing and implementing agri-environmental measures on farm is a main advisory task in this realm. Knierim (1997) provides a classification for farmers' demands for agri-environmental advisory services: 1) Knowledge about current rules and regulations (cross compliance or greening), 2) Decision and implementation support with voluntary options for agri-environmental measures by providing and structuring information (at the level of process changes), and by critically questioning, and 3) Decision and implementation support in adapting ecological aspects to whole operations, or a specific farm enterprise branch, in which the advisor accompanies the entire process and constantly encourages monitoring the progress.

[2] Constitutional rules determine, for example, the bodies of political decision-making and who are elegible to participate in political decision-making. Collective-choice rules are rules that define the specific procedures of collective decision making. (Vatn, 2015: p.144)

Agri-environmental advisory programmes have some specifics that differentiate them from production-oriented agricultural advisory programmes. The common feature is the target group, which are farmers- also including farm enterprise managers or land managers. The specifics include problems related to the challenge of combining agricultural production knowledge with environmental knowledge. According to the authors, these are:

i) *A role conflict of advisors*: Advisors in agri-environmental advisory programmes often have the difficulty to convey innovations related to environmental-friendly production practices that are not demanded or of interest by the farmer in the first place. Hejnowicz et al. (2016, p.240) speak of "*tensions arising from the competing agendas and objectives of the different actors involved* [...], *for instance, farmer selection of management options versus Natural England's target environmental objectives. Farm advisors suggested that they had to negotiate this balance whilst also serving the needs of their clients."*

ii) Challenging knowledge qualification requirements for advisors: advisors in agri-environmental advisory programmes, e.g. biodiversity advisory services that are just developing in Germany now, have the task to discuss environmental impacts of their farming practices and options for change with farmers. For this task the advisor needs to know a lot of detailed nature-related knowledge. Additionally, trust within the advisor-farmer relationship is a precondition for initiating change processes in farming behaviour. In Germany, it is currently discussed among actors involved in biodiversity related advisory programmes: when is it useful and practicable to involve, or in privatized systems, contract an agricultural advisor and an environmental advisor as a team?

iii) *High diversity of agricultural and environmental actors:* The recent development of pluralistic advisory services already implies a growing diversity of actors involved in advisory services; this becomes even more evident for agri-environmental advisory programmes. Institutional arrangements are manifold and are highly affected by the historical development of the national agricultural advisory system, esp. its privatization and centralization status.

iv) Linkages and cooperation between actors: The level of cooperation and linkages between the different actor groups from the public, private and third sector highly influences the development and implementation of agri-environmental advisory programmes. Different levels of linkages are useful: linkages between agricultural and environmental actors as well as linkages between public, private and third sector actors. Conflicts regarding objectives and further arrangements of agri-environmental advisory programmes most likely occur for example, when agricultural and environmental public authorities are not well interlinked and a cooperative working atmosphere for designing such programmes is missing.

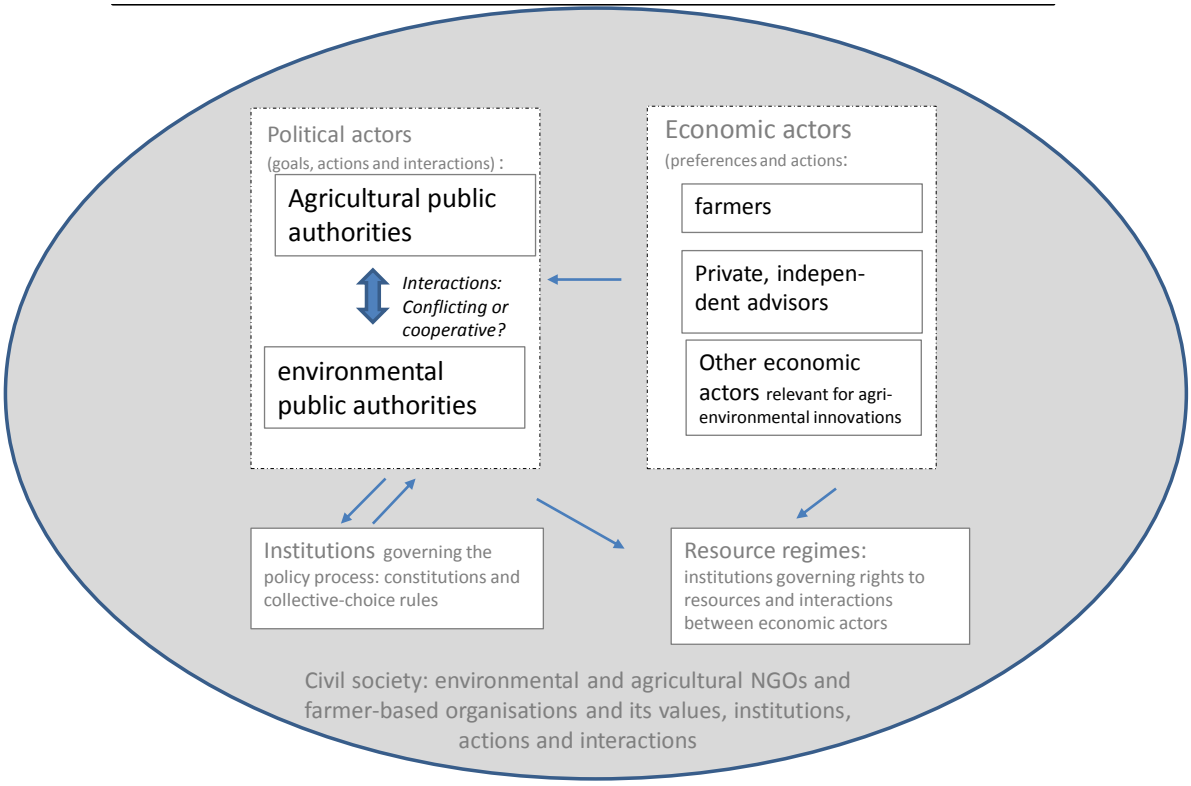
v) No clear border between advice and educational activities: Agri-environmental advisory activities often include or rely on awareness raising activities as a pre-requisite for demanding agri-environmental advisory services (Klerkx and Jansen 2010). Methods for awareness-raising are often based on group approaches and closer to learning and information situations- and therefore educational activities- than farmers' problems'-based advisory activities (Hoffmann et al. 2009).

3.2 An analysis framework for governance structures in agri-environmental advisory services

The following framework that aims at analysing governance structures and coordination aspects in agri-environmental advisory programmes combines the framework of Birner et al. (2006) with the definition of 'governance structures' of Vatn (2015) (see Section 2.2), and incorporates the specific characteristics of advisory programmes related to agri-environmental innovations (see section 3.1). In

this realm, it is important to specifically focus on interactions between the different economic, political and civil society actors that are involved, as the role conflict for agricultural advisors in conveying environmental concerns and related innovations is centrally influenced by interactions. The complexity of agri-environmental advisory programmes is expected to be higher than in agricultural advisory programmes, because more actors are integrated, as they come from the agricultural and the environmental field. This is a challenge not only with regard to the core advisory activities but also for related quality management in such programmes and necessary competence development of advisors. Coordination within agri-environmental advisory programmes, which integrate this diversity of actors, is challenging. Additionally, as shown in chapter 3.1, it is difficult to draw a clear border between agri-environmental education and agri-environmental advisory services methodology-wise and therefore also governance-wise. Hence, it is necessary to also consider actors and their interactions from the field of education related to agriculture and environment. Figure 3 aims to visualize the above mentioned aspects shedding light explicitely on the box G: 'governance structures' as a characteristic of advisory systems in the 'Best fit' framework (see figure 1) and incorporating them in the figure of Vatn (2015).

Figure 3: analytical framework for governance structures of agri-environmental advisory services



source: own figure influenced by Birner et al. 2006 and Vatn, 2015 (p. 144)

Here, political actors are understood as all actors involved in the decision about the design of an agri-environmental advisory programme, the implementation of the programme as well as the monitoring and evaluation activities. Presumably, in some cases it might be difficult to clearly differentiate between the political actors in 'Agri-environmental scheme' development and involved the agri-environmental advisory programme. Economic actors in the governance of agri-environmental advisory services are considered mainly the clients and the providers of advisory services. Interactions

according to Vatn (2015) may be governed by trade, command, community rules, or no rules; differentiation between formal and informal rules is important.

Open questions regarding this framework are:

- Are public advisors in public authorities political or economic actors? Vatn (2015) mentions, "that the same person may be an economic and political actor, as well as participating in civil society. "*We talk here of roles. Economic actors may be private, state or community based.[...] We may define civil society as the arena for creating the normative basis of a society and civil society actors as the set of actors expressing the interests and will of citizens*." (Vatn, 2015: p.144). This means for public advisors, it depends on the task they fulfil in an agri-environmental advisory programme, for example, designing the programme, or being a contractor as any other private advisor.
- Which relationship links the other characteristic elements, including the capacity and management of service providers (Box M) and advisory methods (Box A) both needed for agri-environmental advisory services (Birner et al. 2006)?
- What is the relation between coordination aspects and governance structure? **Coordination** is understood here not similar to governance, but as a specific task and form of interaction of actors within a governance structure. The main analytic question so far is: Who needs to coordinate what within an agri-environmental advisory programme? More specifically, in how far, in which form and intensity, do, for example, private advisors or farmers' organisations participate in the process of designing an agri-environmental advisory programme.

4. Preliminary reflections upon the roles and the coordination challenges of political and economic actors in two German agri-environmental advisory programmes

In this section, empirical insights from advisory services related to biodiversity conservation and water protection in agriculture are briefly presented and reflected by applying the above framework to analyse briefly the actors involved, and their role with regard to coordination.

Biodiversity advisory services (BAS) in Germany

The following information and reflections are based on the participation of one of the authors in a two-day workshop on advisory services related to biodiversity and agriculture (BAS), where different approaches where presented and discussed by approximately 30 participants, including advisors, administrative staff, and researchers involved in BAS (also compare Knuth et al. 2015).

Biodiversity-related agricultural advisory services (BAS) in Germany have now existed for 14 years. The approaches show how diverse their organisation and financing within Germany are. Moreover, the approaches also highlight how close the BAS are related to the historical development of agricultural advisory services within each German state, especially because of its federal governance structure in policies related to agricultural education and advisory services. In Saxonia with a just recently privatized advisory system, the German umbrella association of Landcare Associations[3] (DVL) – a non-governmental organisation - is the coordinating institution for the BAS programme, but further providers come from the private and third sector and BAS is mainly financed through European rural development funds (EAFRD). In contrast to Saxonia and other privatized advisory systems (especially in East Germany), BAS in Rhineland-Palatinate is integrated into public advisory services provided by state and local agricultural offices (‚Offizialberatung'), which are in the middle of restructuring

[3] For further information on Landcare associations (LCA) Schomers et al. 2015 provide a case study examining the potential role of LCAs as intermediaries to improve the performance agri-environmental measures framed as payments for ecosystem services.

agricultural advisory services by reducing services to information and advice related to the Global Challenges, mentioned in the beginning. BAS in Rhineland-Palatinate is financed out of the state budget; EU funds are not used. In the state Mecklenburg-Pomerania two parallel BAS approaches exist, both related to agri-environmental measures and one stronger to the CAP Greening Compliance than the other. In both approaches, mainly private and non-governmental advisory organisations are involved in the development, coordination, and provision of BAS. One approach, related to Greening, choice and implementation of agri-environmental measures at the farm-level, are financed (only) by farmers, mostly large farms (>500 ha). Another BAS approach is financially supported as a pilot project by the state.

Political actors in these approaches that are involved in coordination activities such as developing, deciding about and implementing the design of an advisory programme include public authorities on state level, such as Ministries and subordinated state offices. However increasingly private and non-governmental actors become active in developing BAS approaches, and mainly public authorities provide financial support. Economic actors as providers and clients of advisory services in this realm would include, for example, private, independent or public advisors as well as conventional and organic farmers. Considering the history, BAS in Germany appears to be developed first, for organic farmers (van Elsen (ed.), 2008). In later years, BAS has also become interesting for conventional farmers in relation to agri-environmental measures. Here it becomes visible that a historical view for analysing governance structures within the framework outlined above, is necessary to develop a better understanding of who are, or have been, the actors involved and what are their goals and preferences. This is supported by Labarthe 2009 and his approach of combining a historical institutional analysis with a social network analysis for analysing the Dutch and French advisory system with regard to multifunctional agriculture.

Agricultural advisory services to support the Water Framework Directive (WFD) in Germany

The following case provides an example for the process of designing ‘agri-environmental advisory services with regard to the Water Framework Directive’, here in the following shortened to ‘Water Advisory Services’ (WAS). In 2012 both authors were involved in developing a conceptual framework for WAS for the German state Brandenburg commissioned by the state environmental office in Brandenburg. This state has a high level of privatization and commercialization of its agricultural advisory services, meaning no official public advisory infrastructure or financial support for advisory services exists and only actors from the private and third sector, most often private, independent advisors, are supposed to provide agricultural advice to farmers and farm enterprise managers (Knuth and Knierim, 2013).

The conceptual WAS design is based on an analysis of seven other German states and their WAS approaches in combination with investigating the current situation in Brandenburg with particular interest in who provides already WFD related information and/or advice. Preliminary results were discussed with actors from environmental and agricultural authorities on state level. Private, independent advisors as economic actors could be scarcely integrated, as, for example, only 7 advisors followed a workshop invitation to discuss options for providing (and financing) WAS in Brandenburg. An interesting fact in this case is that this conceptual design was commissioned by the state environmental authority to a research institution without notable involvement of the agricultural public authorities. Agricultural administrative staff was later involved in workshops presenting and discussing (preliminary) results. However, the concept developed in 2012 has not been visibly implemented. Presumably, this is because WAS implementation needs a close, cooperative interaction between policy-makers from the Ministry of Agriculture and the environmental state office as the commissioner of the conceptual design, for example to use Rural Development Funds for this. This cooperative interaction appears to be difficult in Brandenburg.

5. Conclusions

The differentiation of actors within the framework into political, economic and civil society actors helps to differentiate actors according to their roles in agri-environmental advisory services. The combination

of the Best fit framework with Vatn's (2015) explanation of (environmental) governance structures aimed at integrating environmental aspects of agri-environmental advisory services into the Best fit framework. The first application of the framework developed in chapter 3.2 revealed that further reflections and adaptation of this framework are indispensable. In the application process of the framework it became visible that especially the resource regimes were very difficult to operationalize for advisory services, similar experiences could be made for the institutions governing the political process. It seems to be more applicable to use the categories of provision and financing of advisory services (see Birner et al. (2006)) and add the task or process of designing agri-environmental advisory programmes including monitoring and evaluation. Furthermore, impact and outcome of agri-environmental advisory services need to be integrated into the framework, as they provide important means to assess the appropriateness governance structure.

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