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Mobilizing Resources for Collective Action and Sustainable Development:

Mobilizing Interest or Shared Values?

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Abstract

In this paper we address how actors mobilize resources to realize collective change and innovation to solve common issues. We draw on previous studies anchored within the IMP literature that have offered two perspectives on how actors concerned with a common issue mobilize resources for collective change and innovation. We review these perspectives and challenge them in an empirical setting to arrive at an understanding of how they relate to each other and how they contribute to the mobilization of resources and collective action. One perspective emphasizes the mobilization of interest, and the other the mobilization of shared values as key mechanism to mobilize actors and their resources to contribute to collective action. We draw on an in-depth-case study consisting of two interrelated issue-nets faced to combine environmental with socio-economic issues in a sustainable way. The findings suggest that shared values are important to the extent that they help in raising awareness for the issue and that they can temporarily hold a group together. However, we found that collective action for sustainable development only occurs once actors see how their contribution can benefit their private interest. We theorize on our findings and suggest that interest of actors can only be directed once they can be properly calculated in terms of cost and benefits of their contribution to collective change. We reflect on these findings and conclude with tentative theoretical contributions and implications for further research.

Keywords: collective action, common issue, issue-nets, resource mobilization, calculation and calculative devices sustainable development

Introduction

In this paper we draw on an empirical study to address how actors concerned with a common issue, mobilize resources to enhance collective action for sustainable innovation. The type of innovation that we examine can be considered as radical which is defined as "innovations that embody a new technology that results in a new market infrastructure" (Garcia and Calantone 2002 p. 121). The focus of this study lies in the processes and interactions between actors in the development of a new market infrastructure. In our study, the development of a new market infrastructure is seen from the point of view of emerging networks where functionality needs to be developed, resource compatibility enhanced, and realize interactive effects between public and private actors (Håkansson, Ford, Gadde, Snehota, Waluszewski, 2009).

Such actors can organize themselves in so called issue-nets which are defined as temporarily networks consisting of collective public and private actors -usually not business actors- that are centered around a common an intended to dissolve once the issue is solved or loses its significance (Ritvala and Salmi, 2010). Because actors participating in issue-nets are concerned with public interests such as safer traveling, better health care, a cleaner world, etc., they may face all kind of difficulties to induce change because of "free-rider" effects since benefits are collective but costs individual (Olson, 1974, Oliver, 1993). An important tasks for issue-nets is raising awareness for the issue at hand but their major challenge is to set change processes in motion by mobilizing resources in order to make change happen.

IMP (Industrial Marketing Purchasing Group) literature was early to note that resource mobilization and coordination of networks are central processes in change and establishment of networks (Håkansson and Snehota, 1995, Axelsson and Johanson, 1992, Möller, 2010, Mouzas and Naudé, 2007). While these studies were focusing on change and mobilization of resources in business networks, only few studies have treated how resources and actors are mobilized by those concerned with a common issue, for example by issue-nets (Araujo and Brito, 1997, Brito, 1999, Ritvala and Salmi, 2010). With this paper we contribute to the latter stream of literature. We believe that this is important because societal issues are omnipresent and in order to solve them, a substantial amount of energy and resources needs to mobilized to set up linkages and collaboration among several heterogeneous actors with often divergent interest and values.

In this paper we discuss two network approaches with different foci on resource mobilization strategies by issue-nets anchored within the IMP literature. The first one focuses on the mobilization of actors with divergent interests and how these interest are negotiated and converge to raise collective awareness for an issue (Araujo and Brito, 1997). The second one suggest that resource mobilization and actor commitment is preceded by the establishment of a social contract or shared values before any commitments occur to join collective change and solve the common issue (Ritvala and Salmi, 2010). For collective action to occur resources needs to be mobilized and therefore, our question is whether resource mobilization transpires by mobilizing divergent interest of individual actors or via the establishment of shared values amongst actors?

We draw on a comparative in-depth case study of two issue- nets situated in Germany and the Netherlands. Both nets are concerned with commercializing regional landscaping operations by developing a market for biomass material with the purpose to preserve the cultural value and identity of the landscape, restore the ecological

balance, and become less dependent on traditional energy sources. In a way, these actors attempt to combine sustainable development driven by a concern about environmental issues with socio-economic issues (Hopwood et al., 2005). This case is particularly interesting because both issue-nets are part of the same platform but in examining their actions, we saw different outcomes. In one case we saw the beginning of collective action and a provisional stabilization of a network while in the other case, the issue-net stalled and was so far not able to establish connections between public and private actors and mobilize resources.

With this study we produced several theoretical implications that can contribute to further theory development regarding network mobilizers such as those concerned with a common issue. (Araujo and Brito, 1997, Ritvala and Salmi, 2010, Brito, 1999) but also to a lesser extent, to literature on resource mobilization and coordination in business markets (Möller, 2010, Mouzas and Naudé, 2007, Mouzas et al., 2008, Axelsson and Johanson, 1992) and interaction between business and non-business actors in the establishment of new markets (von Raesfeld 1997; Håkansson and Waluszewski 2002)

The remainder of this paper is structured as follows. In the next section we briefly discuss the differences between issue-nets and the notion of strategic-nets to induce change in business fields. Then we review extant literature on resource mobilization by issue- nets and from there we refine our approach for our case study. Then we set out our case study design including methods and techniques for data collection and analysis. In the subsequent section we present our case study followed by an discussion and reflection. In the final section we conclude our paper.

Strategic-nets versus issue-nets

Within IMP literature, scholars, have addressed how business firms intentionally can create so-called strategic-nets. Strategic-nets consists of three or more firms who collaborate for their private interests. Collaboration can involve new technology development in R&D nets, formation of competitive coalitions, etc. (Möller et al., 2005, Möller and Rajala, 2007). The purpose of such strategic-nets varies from achieving more efficiency through value activities integration and coordination up to radical change solutions by creating new dominant technology and commercial solutions within their business field (Möller and Rajala, 2007). The drivers behind strategic-nets is a combination between private goals that individual firms pursue, and collective interests of often complementary business firms that attempt to influence their business field (Medlin, 2006).

Issue-nets on the other hand serve a common interests whose purpose is to raise awareness for collective interests which transcend the interests of institutionally represented groups of actors (Brito, 1999, Araujo and Brito, 1997).The origins of the concept of issue-nets can be traced back to policy network studies, organization and marketing, and management studies (Brito, 1999). Some have used the expression issue-network (Ritvala and Salmi, 2010), or issue-based net (Araujo and Brito, 1997, Brito, 1999) for the same phenomenon that is defined as *"a form of association mainly based on cooperative relationships amongst actors who aim to cope with a collectively recognized issue by influencing the structure and evolution of the system(s) to which they belong through an increased control over activities, resources and/or actors"* p.93.

These cooperative relationships often constitute a heterogeneous set of private and public embedded actors across different fields and networks such as in policy,

research, innovation, and business networks (Ritvala and Salmi, 2010). Because of their focus on collective interest, issue-nets may play an important role between the reciprocal worlds of technology and society (Schot and Rip, 1997) and co-shape technological transitions from a common issue perspective. Interaction between issue-based nets and these groups is thus not only restricted to social exchange but can also have a political, technological and economic exchange dimension.

An important difference is that, issue-nets (the term that we contend in this paper) are usually not formalized structures. They often represent themselves as virtual nets but their activities and responsibilities may sealed by contract (Brito, 1999). Another important distinction between strategic nets and issue- nets is that the latter are by definition supposed to dissolve once the issue is solved or loses its significance (Ritvala and Salmi, 2010).

Because its concern for the public good, such a cleaner environment, safer traffic, etc., issue- nets face the difficulty of how to overcome collective inaction (Oliver, 1993). (Araujo and Brito, 1997) suggest three problems that constitute collective inaction. The first one is the occurrence of "free-riders" because benefits are collective but costs are individual (Olson, 1974). Second, the contribution of an individual becomes indiscernible when groups of contributors become larger. Third, the costs of setting up collective structures may inhibit individual contributions. However, there is no need that everyone needs to be mobilized for achieving collective benefits (Brito, 1999). As Araujo and Brito (1997) & Brito (1999) propose, critical mass to a threshold level can be provided by a small subset of energetic resourceful actors with appropriate interests that can take the lead and act to provide the resources for the collective benefit (Granovetter, 1978, Macy, 1991). Resourceful actors are those actors that can make a difference because of their position and can take advantage of increasing returns by contributing to collective interests (Oliver and Marwell, 1988).

Mobilizing interests or values?

In the absence of any formal structure and probably a lack of legitimacy to use power or force to mobilize actors (Olson, 1974), issue-nets may struggle to find ways to mobilize actors for collective change. It is here where IMP literature has offered a few strategies that revealed its merits in different empirical settings. Araujo and Brito (1997) study involved an issue-net concerned with finding solutions for excessive production of wine farmers in the Portuguese Port wine industry. Raising awareness for this issue amongst involved partners (farmers, traders, shippers, distributors, and associations), collective action was mainly due how divergent interests where (re)negotiated and constructed through interaction. Change was mainly triggered when interest where aligned by the use of power and agency by actors and the possibility of actors to compensate losses by altering the constitutional order of the network. Araujo and Brito (1997) study also strongly suggest that identities of actors involved and the roles that they take changes each time from more active to passive depending on the standpoint of others. An important observation made by them is that exercising power and agency shaped "the constitutional order of the network rather than the structural position of one or a few individual actors" p41. This observation suggests that structural network positions are merely effects of prior collective actions that in fact causes the excessive wine production. In other words, when each actor insisted on maintaining the constitutional order and their network position (if ever possible), the problem would not have been solved. From our reading of Araujo and Brito's (1997) work, we understand that collective change is a matter of how these

divergent interests are mobilized by agency and power and to make them more convergent. Their paper suggest that collective action involves the mobilization of interests

Recently, Ritvala and Salmi (2010), who were drawing from an institutional entrepreneurship perspective (e.g.Wijen and Ansari, 2007, Fligstein, 2001), report a case study of an emerging issue-network concerned with the poor condition of the Baltic see. This issue-network consist of intergovernmental bodies and non-governmental organizations. Raising awareness for the issue was triggered when actors where personally wakened, "when seeing the toxic cocktail of blue-green algae" supported by scientific evidence that suggest a permanent harm to the environment (Ritvala and Salmi 2010 p.904). Then actors became personal responsible for the environment and could enhance their socio-economic status by doing good for the environment and show commitment by making financial investments and mobilize other actors by shared values into the issue-network. Ritvala and Salmi (2010) found that establishing shared values, sense of moral responsibility, enforced by the role of polluted artifacts, precede resource mobilization or activity changes, and thereby suggesting that their finding deviates from Mouzas and Naudé's (2007) model of network mobilizers in business markets. Mouzas and Naudé (2007) suggest that network insights, business propositions and making the deal precede social contract and shared values.

In their analysis Ritvala and Salmi (2010) rely on the existing constitutional order of the network and positions of actors including their social capital and their temporal orientations by recognizing that both historic backgrounds and future expectations of actors matter and influence the shape and outcome of an issue-network. Hence, for them collective action can occur when shared values for an issue are mobilized.

Both contributions are rooted in earlier discussions about how collective action is achieved. The triggers of change that Araujo and Brito (1997) report parallels Weick's perspective on collective action. For Weick (1979) collective actors occurs when actors converge and are organized around means instead of shared ends Weick (1979) argues, why an actor makes a contribution or why it is needed is only of secondary importance. More important is that a contribution is made which parallels (Czarniawksa, 2004) notion of action-nets: first there are actions, then, as a possible outcome, a collective structure emerges By example, the actors in Araujo and Brito (1997) story may all have share the idea that the industry should indeed lower the production of port (common ends) but interests where too divers regarding the means how to achieve this. Consequently, the means became the center point and this requires communication and substantial negotiation and shifting identities to induce contribution of actors. In other words, sharing visions or goals are not necessary ingredients to induce collective action (von Raesfeld,1998), a view that can also be found in Lundgren's perspective on network change where mobilization processes don't require shared goals among actors (Lundgren, 1992). Nevertheless, Lundgren (1992) contend that mobilization and collective change in networks can be smoothened "if at least some of these actors share a common vision" (1992 p. 160).

Arguments that supports Ritvala and Salmi (2010) notion of the importance of shared values and beliefs can be found in literature on social capital (Nahapiet and Ghoshal, 1998, Coleman, 1988, Tsai and Ghoshal, 1998, Batt, 2008). Nahapiet and Ghoshal (1998) consider that having a shared code or paradigm among embedded actors is an important attribute of social capital. This dimension of social capital facilitates a common understanding of collective goals that can be deployed to exchange and combine resources within the network (Tsai and Ghoshal, 1998). Support can also be

found in the work of Ouchi (1980) and Barber (1983). Ouchi (1980) for instance argues that “common values and beliefs provide the harmony of interests that erase the possibility of opportunistic behavior" (1980 p. 138), which then seems to be important for trustful exchange. These studies implicitly suggest that it is important to first have established common ends, such as shared values, visions, intentions before anything will be mobilized to achieve collective action and change.
In the next section we set out our approach in which we compare these two perspectives in an empirical setting of two issue-nets involved in sustainable development.

Case study design

We conducted an in-depth comparative case study (Yin, 1994) of two related issue-nets concerned with commercializing landscaping operations by developing a market for biomass material with the purpose to preserve the cultural value of the landscape, restore the ecological balance, and become less dependent on traditional energy sources. Each issue-net is concerned with the same common concern but they operate in different countries. One is active in a German region and consist of seven persons and the other in the Netherlands, consisting of six persons. The regions are Münsterland, Germany consisting of several Kreises (sub regions) and the Achterhoek in the Netherlands. Both regions are linked with each other and covers in total approximately 8000 km2 and inherits about 1,9 million citizens. This region is known for its rich variety of landscape elements that characterizes the whole region. Tourists are attracted to this region because of quietness and of course the unique landscape sceneries. Proper maintenance of these landscape elements is considered as very important to conserve this unique landscape not only to assure visits from tourist as well as to preserve the ecological balance. This means that sprouts from these woodlands and hedgerows need to be removed on regularly basis. The issue-net is concerned with the question of how maintenance can be organized more centrally in an economic attractive and ecological responsible way. One way to do this is to commercialize landscaping activities by distributing residuals from forestry operations as high quality biomass energy source for heat purposes. Principally, the issue- net believes that excessive transportation of biomass material should be avoided, and distribution should take place on a small scale, meaning within the region. Even though the fact that the issue is still significant, we may not speak of any success yet as the activities of both issue- nets are still on-going. This implies that we must be careful in evaluation their achievements in terms success or failure since significant collective change has not occurred yet.
The project has started in 2007 and is mainly financed by the interregional community for encouraging interregional cooperation (EUREGIO) and its grand runs until mid-2013. Total investment is Euro 850.000. Co-financers are a few municipalities in the Dutch province of Gelderland and the German federal states Nordrhein-Westfalen and Niedersachsen. Our involvement so far started in August 2010 and is still on-going. We report the key events spanning the period 2007 until the beginning of 2011.

Data collection and analysis

All authors) where involved in this research project and two of them where engaged in field work (The, Loohuis). We used multiple data collection methods and follow

procedures as suggested by Corbin and Strauss, (1990) and Eisenhardt, (1989). The data was collected in an eight month period starting in August 2010 until March 2011. A substantial part of the data was collected in real time by observations during project meetings, interviews with members of the issue- net, people from knowledge institutes in their role as advisors of the project, and biomass technology producers. Data was also collected from discussions during several workshops organized by issue-net members to promote and share their ideas with local policy makers and potential users. We also studied documents like research reports, project agendas, and minutes of the monthly meetings.
Another part of the data was collected by retrospective accounts. We interviewed experts who were early involved in the issue and members of the issue net. This was necessary to enhance our understanding of the background of the project. Doing both real time and retrospective data collection allowed us to compensate the disadvantages of retrospective data collection were respondents have the tendency to leave out events that make their story les coherent (Poole and Van de Ven, 2004, Van de Ven, 2007). Furthermore, our approach concerned both surface level and more deeper structured level data (Pentland, 1999).
Our data analyses procedure was organized as follows: From the generated data (mostly written), we identified the most essential information that could serve for further analysis. Our procedure for qualifying essential information was based on a consensus method. The criterion is that all researchers must have found consensus about the relevance of the information. This procedure allowed us for further analyzing and interpretation. To be sure that our interpretation reflects those of our key informants, we organized two workshops for verification and refinement of our interpretation. To organize our interpretation of empirical findings, we followed Axelsson and Johanson, (1992) perspective on resource mobilization and deployed their question "who could be mobilized for what, by what?" (p221)

Issue-net governance and background

The activities of both issue-nets are loosely and informally structured. There is no officially designated center from where activities are coordinated. However, each month, members of both issue-nets meet each other for evaluating actions, and set agenda's for further action. While these monthly meeting have a rather formal character, informally, participants approach each other by phone or e-mail for updates and feed-back on their actions.
Despite the fact that this project covers an interregional project with one central common issue, both regions are influenced by the scope of national renewable energy agenda's and support by local policy makers. Germany for instance, is considered having a cutting-edge position in the market for power generation from renewable energy. In the last years, 280.000 jobs have been created in the total renewable energy industry. The share of renewable energy amounts to 7.7 % and the objective is to increase this percentage to 14% in 2020[i] (The EU have set 20% in 2030 for each country in the EU). Experts believe that its success is dependent on the long term commitments of the German government to compensate technology developers and users with bonuses and incentives to stimulate use of renewable energy sources generated by biomass, photovoltaic and wind power. Nevertheless, the penetration of renewable energy varies for each region, depending on the policy, but also availability

of natural resources such as forests for biomass and space to generate sufficient wind energy.
The renewable energy agenda in the Netherlands differs from Germany in several ways. The Dutch government is also bounded to EU objectives and has therefore established a so called energy transition agenda. Their target is 14% renewable energy generation in 2020. So far, it seems that this can only partly be reached. Currently the percentage renewable energy amounts on average 7% (wind, biomass, solar)[ii]. The percentage for biomass as energy source for electricity, fuel or heat is estimated on 5% of total energy consumption which makes energy generation form biomass in principle an important candidate for the future. However, the incentive system and subsidies for developing renewable energy technologies is considered as insufficient and complex. Moreover, the new government in the Netherlands has frozen or stopped several subsidies for innovation. [iii] Experts believe that this will probably constrain further energy transition as firms and local policy makers are reluctant to engage in all kind of entrepreneurial activities because of the risks and uncertainties involved. Nevertheless, things have been set in motion. Today, there seems to be market for large scale biomass installation (power plants) that demand great amounts of biomass material. Collectors of raw material gather material from everywhere, mostly from those place where valuable biomass material is considered as waste. Because of these different backdrops, we chose to report the key events of each issue-net separately.

Mobilizing resources in "Energiequelle-Wallhecke"

The issue-net in Germany carriers the project name "Energiequelle-Wallhecke". The German issue-net is a part of the bureau Agenda 21 project. The bureau Agenda 21 is an initiative of the Kreis Steinfurt and encourages the use of renewable energy and sustainable innovation. Their major objective is to become totally independent of traditional energy sources and imports in 2050. This bureau has defined several programs of which the Enerqiequelle-Wallhecke is one of them. This program however, is managed independently by the members of the issue-net. In 2007, the issue-net defined a few objectives for their project. First, it was important to them to collect exact information and knowledge about the current state affairs regarding of the forests an hedges. This information was considered as important because from there on, they could make estimations about the potential quantity of biomass that can be derived. They were not able to collect this data by themselves and invited prominent consultancy bureaus specialized with landscaping concerns and related knowledge institutes to conduct research and provide them with reports. Having this research done by prominent consultant agencies and institutes was also considered as important because it was gives them a kind of legitimacy or status that would help them in furthering their concern to the communities in the region. With communities is meant the citizens, municipalities, owners of forests and hedges, and entrepreneurs that are hopefully willing to pick up landscaping activities. The key message brought to these communities was that sustainable landscaping activities result into a better balanced ecological system and can contributes to economical sustainable development once biomass material is regionally used for heating purposes. Collecting data and raising awareness for the issue where the main activities of the issue-net in the first two years. Although their concern for the issue and their project activities was positively received by several parties in the region, it did not lead to any substantial contributions of any of these parties.

Municipalities own approximately 10% of the forests and hedges in the region and the rest is owned by many farmers and landowners. For the issue-net members, it became very important to mobilize both municipalities and private owners and have their properties registered. Their registration is considered as important because it allows them to gain insights in how these properties are divided and connected to each other to make later bundling of landscaping activities possible. The question for the issue-net members was, how to attract these municipalities and private owners?
The issue-networks agrees to allocate project money for developing an internet system, called "WaLLIS" (Hedgerow information system). With this advanced internet-system, owners (municipalities, farmers, and landowners) of hedgerows and forests could register their properties in the system by themselves. The system was promoted and brought under attention at different municipalities and private owners.
It was not really difficult to attract municipalities close to Kreis Steinfurt because by this project, they could profile themselves first as green-minded with the possible prospective to stimulate local economy when the project succeeds. With their registration, they could also display themselves as frontiers of sustainable development to their community of farmers and landowners. Their registration was important for the issue- net because their commitment helped them to gain further legitimacy towards other Kreises and their municipalities and of course the many private owners of forests and hedgerows residing in the region. It seems that mobilizing municipalities for making entries in the system was the result of how they calculate their benefits of contributing to this project. While the mobilization of municipalities within the Kreis Steinfurt apparently turned out to be a success, the mobilization of private owners was not.
Normally these farmers and landowners perform landscaping operations by themselves, having these activities outsourced, remove it, or simply let nature deal with their hedgerows. For most of them, these activities are time consuming and because of that, deserve not great attention. After the system was installed and promoted, there were hardly any entries made by them. Issue-net members believed that, especially farmers, are reluctant to register their properties because it is unclear for them why they should do so. For these project members however, it was totally clear that owners would also benefit from landscaping operations when the residuals are not considered as waste, but as a valuable and regional produced energy source**.**
In an interview with the Chief of forestry in Nordrhein-Westfalen (Forstamt) who was one of the initial advisors of the project. He told us that:

"Yes, that's the whole idea that owners are compensated for maintenance work of their properties instead of carrying all the cost by themselves. This is indeed new for them and for the whole region and therefore we have to explain them how that works"

To involve private owners, issue- net members decided between 2009 and 2010 to undertake several actions. First, they mobilized so called hedgerow managers (Heckenmanagers) into their project. Each Kreis has a hedgerow manager who is responsible for supervising the state of the hedges and monitor when landscape activities take place in their Kreis. Second, they add a calculation tool on WaLLIS. This calculation tool was developed by the Wageningen University for agriculture, the Netherlands. A calculation tool enables owners, prior to registration and without liability, to calculate the potential amount of biomass of their properties based on market prices for labor. The cost of labor are not difficult to estimate. However, market prices for biomass material can only be established once the quality can be determined. Therefore, samples were taken from hedges from different places in the

region and sent to the University of Munster (Wald & Holz Centre) to qualify this biomass material. Since, then, this center received an advisory role in the issue-net. During one of our visits to a farmer that recently had invested in a biogas installation, we noticed the importance of calculating costs and benefits, he said:

"I would not have invested in this biogas plant if these feed-in tariffs where not long term guaranteed by the government. You see, I receive 4 [Euro] cents for [this], 6 cents for [that] [….etc….] accumulating into 21 cents for each Kw fed back to the electricity network"

Helping private owners with making cost and benefits considerations was now seen as crucially important for mobilizing them, and this was considered to become an important task for the Hedgerow managers. By being locally present they can actively mobilize owners and visit them when they have questions about registration or helping them in qualifying their properties. This can now be done by the quality standards established by this qualify center. Owners can now see how registration into the system can be beneficial for them–provided of course, that there are enough end-users in the region who use the biomass material.

Furthermore, these hedgerow managers are also invited during the monthly project meetings and can report on their progress in their operational area. For the other Kreises, it is valuable to become attached to this project by delegation of the Hedgerow manager because of a few reasons. First, they believed this supports them in leveraging their own green profile: for these Kreises, becoming associated with this project "Energiequelle-Wallhecke" and Agenda 21 has a positive impact on their own green-reputation. Second, Kreises are compensated by this project for the services of these hedgerow managers, which saves them money in a period where they are regularly confronted with budget cuts.
The new role for hedgerow managers is a more active one because now he/she can directly acquire private owners for registration in WaLLIS and advice owners next to their previous responsibility of being present when landscaping activities are performed. For the issue- net, these activities still are of key importance for the success of the project because only then, substantial amounts of lots can be collected for efficient landscaping operations.
Nevertheless, at the same time, the issue- net also realizes that they have to reach municipalities of end-users to achieve a certain pull effect (otherwise it may be a problem to dispense municipalities and private owners for maintenance activities).
For that they invest in promotional campaigns (i.e. brochures) that highlights the benefits of using regional biomass material instead of how that contributes to a better environment. An example of such an brochure is provided in appendix 1.

For 2011, the agenda of this issue-net consist of finding ways to acquire lead-users who then can function as pilots where potential customers can see how the technology works and organizing fairs and workshops in several Kreises to attract both private owners of hedges, end-users and local entrepreneurs and convince them from the benefits of using regional biomass material as alternative energy source. Members believe that hedgerow managers are in a best position to organize such events because they are familiar with local issues and the municipalities. Both Kreises and their municipalities co-sponsor these fairs together with local entrepreneurs for the reason that they can profile themselves to the municipalities with a apparently successful sustainable project and to encourage local networking amongst local entrepreneurs and citizens.

This concludes the current status of the German project. Now we turn to the issue-based net in the Netherlands.

Mobilizing resources in "Stoken op Streekhout"

The Dutch issue- net originated also from the same concern of preservation of the landscape and connect this to innovative sustainable economic use. The activities of the issue-network span an area named "de Achterhoek". De Achterhoek is a region that has about 334.000 citizens and is also famous for its sceneries and rich fauna which is almost similar to the German region. A few municipality authorities co-financed this project in cooperation with EUREGIO as prime financer.
The initiators of this project are three organizations concerned with maintenance and preservation of woodlands and forests banks and a consultant experienced in landscaping. The responsibility for maintaining these forests lies completely in the hand of these organizations including the exploitation of residuals as long as they follow environmental regulations. This is considered as an enormous advantage as opposed to their German counterparts because they practically "own" an important resource. The only useful contribution of the WaLLIS system for them is that it provides them cartographical information about the state of their forests. However, the costs of landscape operations is high and the price received for residuals does not exceeds the costs. So, far there had been subsidies provided by the Dutch government to cover maintenance costs but it is not sure if this will be prolonged.
There are a few users of biomass installations in this area. These users are farmers who like to be independent and people who are by ideology interested in sustainable energy. They obtain their material directly from one of these three landscaping organizations and make agreements on price and quantity themselves. Members of the issue- net consider these users as potential lead users that can be enrolled into their program.
From 2007 until 2009 members of the issue net involved Dutch research institutions with expertise in sustainable landscape development (Wageningen University for agriculture) to conduct research on several topics. The first one was to provide detailed figures on the potential amount of available biomass in their operational area. The second topic concerned an investigation into the subsidy and incentive system for large scale landscaping operations and bonuses for end-users when adopting biomass technology.Making exact calculations however, was difficult because at that time, there was ambiguity regarding the subsidies for forestry work. As on member of this research institute made clear during an presentation:

We can make exact estimations for today, but it might change tomorrow because the subsidy system is totally unreliable. Furthermore, there are no bonuses for end-users. In the contrary, some local municipalities consider biomass as waste and storing waste require licenses.

Another research topic was to find out about customer preferences. The study proposed that potential users (farmers, institutions) don't seriously consider biomass as energy source unless it's concept is proven and calculations about unit price and return on investments can be made for comparison with other alternatives.

During 2008 until 2010 the issue-based net put a substantial amount of energy in mobilizing municipalities in their project. This was according to them necessary to gain legitimacy for their issue and promote the use of regional biomass as alternative heating technology. To date, there is still a lot unclear and members have the

impression that municipalities rather sit on the fence and wait what happen. As one member of the issue-based net told us

The difficulty is that our operational area is situated in three different local governmental areas with each having its own sustainable development-agenda of which some consider our project as relevant while others may have different priorities. When we approach them, they always say that they like what we are doing and that they share our ideas about sustainable development. However, we get the idea that they just provide lip services to us because no further support is offered.

Over the course of the project, these members notify us several times that it is difficult to receive commitment from these municipalities for their project. Despite the fact that some have showed up during the project meeting and share with them the need for regional sustainable growth.
Since the beginning of 2011, they have reviewed several possible strategies and scenarios but it was unclear which direction should be followed. For that, the issue-net organized a symposia and invited several stakeholders, such as technology suppliers, research institutes, and local and provincial authorities. They also invited other actors that could be of interest for them such as potential users and interests groups concerned with sustainable regional development. The idea was that these invitees attend workshops where different topics where discussed such as how to establish competitive prices for biomass material without subsidy, how to guarantee deliveries and prices of biomass material delivery, how attract entrepreneurs to develop a regional market for biomass material, and which obstacles to we need to overcome to realize this?
This symposium was considered as a success by the members, first because 56 people showed up and they all actively participated in these workshops. The result was that for each workshop topic, new viewpoints where collected that would give the issue-net new clues for further actions and the main concerns regarding policy could be immediately addressed to the representatives of the municipalities who were also present at this symposium.

Of course we do not know how both issue-nets will develop but what we can see from the case description is that each issue- net has followed its own typical trajectory.
In table 1 (appendix 2) we have summarized the key actions of each issue-net for further analysis in terms of whom, for what, by what?

Reflections

As we can derive from our study we see that both issue-nets had been go through a different trajectory that took place in different backdrops with different contingencies. One important contingency is that, as a result of renewable energy policy, that there is more collective awareness amongst municipalities and communities regarding a shifting energy paradigm in Germany as opposed to the Netherlands. The German government has committed themselves to a detailed and longer term oriented incentive program that enables users, technology producers, and other public and private actors to calculate the costs and benefits from adopting renewable energy sources and technology. Such a detailed and longer term oriented program is not present in the Netherlands yet and it is therefore that private and public actors in Germany are perhaps more open for renewable energy sources and this admittedly contributes to collective action. However, while these settings may differ, the Dutch issue-net seems to be in a better position because they were controlling an important

natural resource, namely the forests and hedges. They were in fact "sitting" on these, according to them, valuable resource, which was obviously not the case in Germany, because the hedges and forests are owned by a few municipalities and many private owners. What we can see from the case study is that the German issue-net was challenged with the difficulty of mobilizing the owners of forests and hedgerows into their program. The (Hedgerow information system) "WaLLIS", considered as powerful calculative device by the German issue-net members, became only effective once it's use and purpose was demonstrated at these private owners. So, called hedgerow managers where necessary to reach these owners to make these demonstrations and calculations possible. Municipalities on the other hand, where more easy to mobilize and making them contributing for collective action by bringing in their forests into the program because this project enhanced their own "green profile" and prospect of economic benefits in the future. Kreises where willing to allow their hedgerow managers contributing to the program because becoming attuned to such a project enhances their green-profile, which was considered important for political purposes. This enabled the issue-net to assign these hedgerow managers as local representatives able to reach these private owners and feedback on the issue-net. In Germany, issue-net members learned that collective action by mobilizing other actors will not take place if they emphasize the importance of shared values around a common theme. Quite the contrary we found, they have learned that mobilization of actors involves calculation that directs the actors interest and resources to contribute to collective action. They believe that the same approach will help to convince potential end-user, as represented by the brochure in appendix 1.
In the Dutch region, on the other hand, we saw that members of the issue- net where mainly in the process of gaining legitimacy and finding ways to interact with local municipalities to raise attention for their project and to clarify ambiguity. However, because of the ambiguity surrounding licensing, subsidies and other incentives, it was difficult for these members to present a clear cut program in terms of benefits and costs for potential users as well as local politicians and the municipalities they represent. This did not imply that this project would not run without incentives or subsidies at all but the ambiguity raised by this became the stone of offence for project members during meetings and interactions with local politicians. Clarity could not be provided during the course of the project and the only option left for members was to emphasize the potential benefits of how this project can contribute to landscape and sustainable future growth of the region, essentially emphasizing the idea of establishing shared values around a common issue. And, indeed, as our study suggest, all actors involved share the vision that sustainable growth is important for their region without any doubt but also without any further actions to be taken up by individual actors. The symposium organized by the members at the end of the case study description is a clear example of how members dealt with this ambiguity. They openly discuss these points in workshops and gain meanings and viewpoints of a diversity of actors revolving the topics raised. From their they hope to develop an agenda and hope to mobilize these actors sooner or later in their program.

Discussion and conclusion

The purpose of this study was to arrive at an understanding of how mobilizing interest (Araujo and Brito, 1997) and mobilize shared values (Ritvala and Salmi, 2010) are related to each other and contribute to mobilization of actors for collective change and innovation. Our study strongly supports Araujo and Brito's (1997) perspective on

resource mobilization. Actors seemingly contribute to collective change when their interest are mobilized first, an observation that is compliant with Mouzas and Naudé, (2007) perspective on network mobilizers or Weick's logic that collective structures emerge from common means instead of shared goals or values (Weick, 1979). However, different than Weick's remark that "[w]hy that person consents to make the contribution or why that contribution is needed is secondary to the fact that the contribution is made" (Weick, 1979, p91), we found that for network mobilizers, it is important to understand why an actor should make a contribution. Hence, understanding ones interest is trivial for resource mobilization. While having said this, mobilization of interest requires that actors can calculate the cost and benefits of contributing to collective change. In other words, calculation directs interest of actors to mobilize their resources and can be seen as a powerful tool for actors, such as those organized in issue-nets as device to negotiate. The notion of calculation and calculative devices has so far been addressed by scholars concerned with the sociology of economic markets and how they are shaped (e.g. Kjellberg and Helgesson, 2006, Callon et al., 2002).

We believe that this research finding calls for further research on how calculation and calculation tools are used as powerful means for network mobilizers to mobilize resources, especially those engaged in sustainable development that normally is considered as a public matter of concern. So far, this relationship has not been explicitly addressed in the context of resource mobilization within networks. Furthermore, we have found that, in the absence of the possibility to make offers calculable (i.e. when there is ambiguity, regarding regulations, licensing's, etc.) shared values or moral responsibility as suggested by Ritvala and Salmi (2010) matter to the degree that they can hold a group together, at least temporarily, however without any substantial contributions. The absence of the possibility to calculate is strongly related to the ambiguity that actors perceive when confronted with common issues. Shared values seems to be important when actors perceive uncertainty or equivocality regarding how a common issue can be solved, then it becomes difficult to direct their interest for contributing. In such a situation, we propose that creating shared values or a common ground can be indeed a potentially important strategy for issue-nets to develop ideas how the issue can be solved. However, at the risk that important parties with deviating values remain excluded from the issue-network. To this, von Raesfeld (2002) found that actors concerned with sustainable methods in the construction industry where merely preaching to the converted and forget about the disbelievers who happen to be the constructors themselves, a group of actors that where of essential importance for inducing collective action and sustainable change.

In summarizing, we argue that both perspectives are not mutually exclusive but in a way are complementary to each other. Resource mobilization thus concerns both a social, and an rational-economical/political dimension but in order to become socially engaged in collective change, actors first must have their interest in terms of personal benefits served.

With this paper we have highlight that actors concerned with common interest (commercializing landscape activities) are not only concerned with interactions on a societal level (Ritvala and Salmi, 2010). Interactions take place at different levels with a diversity of both public and private actors who are embedded in different fields and networks and the nature of these exchange processes where strongly shaped by economic and political interest.

In this paper we have reported tentative conclusions of a research project that is still ongoing. Our research agenda is now strongly directed to gain deeper insights in(i)

the relationship between calculation, uncertainty of how common issues can be solved, and mobilization of interest, and (ii) how actors concerned with a common issue deploy calculation tools during negotiating with other actors in order to mobilize their resources for collective change.

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Wählen Sie zwischen
Öl und Gas! Sparen Sie
jetzt im Handumdrehen!
Wald-Zentrum

Appendx 1

"Energiequelle-Wallhecke"			"Stoken op Streekhout"		
Who?	**For what? (contributes to collective action according to issue-net)**	**By what?**	**Who?**	**For what? (contributes to collective action according to issue-net)**	**By what?**
Research, Knowledge institutes, Landscaping consultancy bureaus	Figures, maps, providing insights, legitimicy	Income, status, scientific interest,	Knowledge institutes	Exact Figures, insights legitimacy	Scientific interest, money, prospect of longer stay in the project
Municipalities in Kreis Steinfurt.	First registrations in Wallis. Creating a role model for private owners. Help to convince other municipalities in other Kreises later.	Influence in the project Contributes to their green profile Future contributions to employability.	Existing users	Lead user function, example for potential end-users	Sharing their experience and ideology.
Hedgerow managers from other "Kreises"	Reaching private owners and help them to calculate and qualify their properties. Delegated representatives locally present. Local information about development from other Kreises	Gives hedge row managers a more active role in landscaping activities. Kreises obtain compensation for their involvement in the project. Kreis can profile their own green-programs to the community and other political bodies.	Regional Municipalities	Actively involving municipalities in their project for allowing licenses for technology and storage of biomass. Promoting awareness and especially legitimacy for their project in the region to the community. Making their ideas more viable.	Exposure of their own green projects. Not really interested. "Sit on the fence" attitude. See how the project develops.
Other Kreises	Promoting the project interest on local level (workshops, fairs, green character)	Profile their green character and. Ride on success of Kreis Steinfurt Aganda 21 success	Different kind of stakeholders (technology suppliers, lead-users, local and provincial policy makers, regional platforms for sustainable development.	Symposia with the purpose to develop an agenda for further actions and induce collective action	Interests are mixed. Technology suppliers hope to find potential customers. Delegates of municipalities could present their green – projects and warm support for this particular project
Farmers and landowners	Registration in Wallis helps to reduce managerial difficulties in organizing landscaping operations and secure supply . Crucial important to overcome critical mass	Having maintenance done for free and receive refund once there is a regional market for biomass.			
End-users (farmers, institutions)	Necessary to set market in motion	Calculation, comparisons with alternative traditional energy sources. Technology advice on application. Sustainable way for being independent (self-supportive)			

Appendix 2