Conflict handling in Renewable Energy Cooperatives (RECs):

Organizational effects and member well-being

Vasco Brummer*

Carsten Herbes

Judith Rognli

Nuertingen-Geislingen University, Germany

Naomi Gericke*

Susanne Blazejewski

Alanus University of Arts and Social Sciences, Germany

Abstract: In this paper we investigate the ways conflicts in Renewable Energy Cooperatives (RECs) are handled. It is shown how the organizational frame of RECs influences the choice of styles of conflict handling by the involved parties. Using a **qualitative approach**, we depict how conflict, mainly by members of the Executive Board, is being handled in RECs and how this affects member well-being. Collaborative values appear to play an important role. The data used for this investigation was gathered by participant observation in the annual assemblies of 15 different RECs in southern Germany.

^{*}E-Mails: vasco.brummer@hfwu.de, naomi.gericke@alanus.edu

1 Introduction

The liberalization of the German energy market in 1998 in combination with state-guaranteed feed-in tariffs for renewable energy, specified in the Renewable Energies Act (EEG), paved the way to a decentralization of the energy sector in Germany. New conditions in the Renewable Energies Act (EEG) in 2008 in combination with a new law on Cooperatives in 2006 that facilitated the founding process led to the rise of an interesting phenomenon in civic engagement in Germany: Cooperatives that focus on electricity and heat generation by means of renewable sources. The peak of new foundations has been in 2010 with 289 newly founded Renewable Energy Cooperatives (REC) (Volz, 2012b, p. 515). The Fukushima catastrophe provided further impetus for the founding of these REC (Stappel, 2011, p. 5). As of 2014, their number in Germany has risen to 973 (Müller and Holstenkamp, 2015) and RECs have received widespread interest both in the media as well as in academia.

People join an REC to achieve goals which they alone are not capable to achieve. These goals or interests are heterogeneous and often complex and multi-layered: Volz (2012a, p. 521; 2012b, p.126-129) names generation of renewable energy, a contribution to the fight against climate change and the avoidance of CO_2 emissions as the main goals that RECs display. Further motives like the search for alternative investments after the experiences of the financial crisis, the idea of a self-supporting community and a desire to add value to the region exist too. Radtke (2014, p. 293) identifies that 93% of REC members join an REC out of ecological reasons, while a profit orientation matters for 56% of the members.

This complex of interests leads to challenges. Interests may seem to be mutual or equally realizable during the founding process. Yet, practical business demands or opportunities e. g. caused by reforms in the institutional environment (Müller and Holstenkamp, 2015, p. 4) (Renewable Energy Sources Act (EEG)) cause the need to readjust later and lead to diverging approaches. Müller et al. (2015, p. 99) name six factors that threaten the feasibility of the REC model and inhibit further growth of the REC sector in Germany: 1. The adjustment in the Renewable Energies Act of 2014, which imply the need for professional management expertise even for mid-sized projects, 2. the Capital Investment Act (KAGB) which introduced a securities prospectus requirement for RECs that were planning to invest in minority shares of larger projects (now alleviated), 3. a lack of civic engagement and paid full-time personnel, 4. the quick change of the business environment which requires constant adjustment of an RECs business model, 5. a lack of funding, 6. market saturation.

Point 3, lack of civic engagement and paid full-time personnel, implies a serious challenge for RECs: The predominant dependence on unpaid volunteers and limited time resources in the management quickly exhausts the management's capacities for an integrative decision-making. When members perceive their interests as no longer being matched or are unsatisfied with organizational processes, the organization falls prone to conflict. Group stability is at question as members of a REC are not existentially dependent on their organisation and may easily exit and seek other ways to fulfil their goals.

Therefore, we propose that handling emerging conflicts in an REC is crucial for the perceived success of an REC and its further development as a cooperative project while conflicts that are not adequately handled endanger the existence and further development of an REC.

This paper investigates which ways of conflict handling REC members employ to achieve their goals and what this might implicate for intragroup relationships which we see as crucial for the existence of an REC.

2 Literature Review

Conflict can be defined as a "process in which one party perceives that its interests are being opposed or negatively affected by another party" (Wall and Callister, 1995, p. 517). There is a wide field of literature on conflict in organizations and its implications. The focus of attention often lays on successful conflict handling in hierarchically structured organizations e.g. Dorow and Grunwald (1980), Thomas (1992), Deutsch et al. (2006). Conflict has long been recognized as an inhibiting factor for success of companies and therefore demand for solutions has been strong. Yet, Deutsch (2005, p. 1) states that "Conflict is an inevitable and pervasive aspect of organizational life" and it has been acknowledged that conflict may also have functional meaning and serve as impulse for evolutional development. While the manager-subordinate relationship has been investigated most e.g. (Glasl, 2011), other research also focuses on headquarter-subsidiary relations and conflict, e.g. the review by Blazejewski et al. (2011).

Cooperatives are hybrid organisations that aim at social welfare and economic revenues at the same time. They have been subject of investigations under various questions. Their organizational structure has been seen as a base of success under certain circumstances (Spear, 2000, p. 521) (Boone and Ozcan, 2014, p. 1007). When it comes to empirical research on conflict and its resolution in cooperatives, examples of worker-owned cooperative firms (Darr, 1999; Hoffmann, 2005; Hernandez, 2006), agricultural production cooperatives (Hagedorn, 1997) and housing cooperatives (Mojtahed, 2007) can be found. The field of conflicts in renewable energy cooperatives has received little investigation so far, only Yildiz et al. (2015) mention it in their work on RECs as gatekeepers or facilitators.

De Dreu and Beersma (2005, p. 105) contend "...the importance of conflict at work is difficult to underestimate", so successful conflict handling is seen as a crucial part for the success of any organization. The way conflicts are handled has great effect on their lasting resolution, as it is assumed that each involved party needs to perceive their interests as adequately matched. The parties involved in conflict can apply different Conflict Styles. While there are many ways to classify these conflict styles, we refer to a model developed by Thomas & Kilmann (1978) and revised later (Thomas, 1992) because it looks at conflict styles in two dimensions: Concern for self (assertiveness) and concern for others (cooperativeness). This lets us evaluate conflict handling in respect to the key values of cooperatives: solidarity and cooperative action. Thomas & Kilmann have developed a system of five different conflict styles, according to their position on the two dimensions. The key to categorizing conflict styles in this model is their perceived outcome as seen by the participants.

Thomas & Kilmann differentiate five Conflict Styles: *Competing*, where a zero-sum orientation can be observed and power struggles lead to win/lose situations. *Compromising*, which aims for an outcome that is minimally acceptable for all and focuses on leaving the existing relationships undamaged. *Collaborating*, where the goal is to expand the range of possible options and to achieve win/win outcomes. *Avoiding*, where one party withdraws from the situation and seeks to maintain neutrality. *Accommodating*, with the focus on maintaining harmony by giving up own goals and acceding to the other party.

Corresponding to the cooperative philosophy and emphasized values of solidarity and mutual promotion we generally assume to find conflict handling styles that have stronger manifestation of cooperativeness such as collaboration, compromising and accommodating.

Fig. 1: Overview of the Thomas-Kilmann Conflict Modes

Thomas-Kilmann Conflict Modes

Assertiveness

Focus on my needs, desired outcomes and agenda. Risking damage to relationships

Competing

- Zero-sum orientation
- Win/Lose power struggle

Collaborating

- Expand range of possible options
- Achieve win/win outcome

Compromising

- Minimally acceptable to all
- Relationships undamaged

Avoiding

- Withdraw from the situation
- · Maintain neutrality

Accommodating

- · Accede to the other party
- Maintain harmony

Cooperativeness

Focus on other's needs and mutual relationships

Source: (Thomas, 1992), adapted.

We define Renewable Energy Cooperatives (RECs) as cooperatives that focus on electricity and/or heat generation by means of mainly renewable sources. A major part of RECs in Germany has its activities in solar power generation as this used to offer easy, scalable setup of facilities with low maintenance requirement. They are mostly dependent on feed-in tariffs which are a crucial part of their return-on-investment calculation. RECs generating local heat by means of biogas plants and/or woodchip-fuelled combined heat and power plants need substantially more maintenance and planning while operating the power plant as well as the lines. They are not dependent on state subsidies like Solar or Wind RECs, their source of income are its members who are its customers as well.

Along with the idea of decentralizing and democratizing the energy sector, many initiatives choose the legal form of a Cooperative as it offers advantages in terms of liability and democratic decision-making, distinguishing it from the large power companies. The choice of the REC organizational frame is associated with expectations to provide the "institutional framework to involve citizens with political, social, and financial aspects of renewable energy deployment, thus democratizing the energy sector" (Yildiz et al., 2015, p. 61).

3 Data sampling

To gather the data for the presented research, we undertook a qualitative investigation. The data sample was generated with support of the Associations of Cooperations in the states of Baden-Württemberg (BWGV), Nordrhein-Westfalen and Rheinland-Pfalz (RWGV). Out of a list with cooperatives in the renewable energy branch, 15 RECs were selected that allowed access to their annual member assemblies. As RECs display inhomogeneous characteristics, we decided for various criteria to form a broad sample of RECs. We assume that these structural frame conditions have an effect on conflicts and critical situations and the way they are being handled. These selected features were the year of establishment, the business area, the number of members, the location and minimum share. The sample is displayed in the table below.

Tab 1: Data sample

REC	Year of establishment	Number of members (2014)	Location	Business Area	Minimum share
1	2013	53	Major City	PV, Wind	100 EUR
2	2012	78	Major City	PV	500 EUR
3	2010	82	Rural	PV	250 EUR
4	2010	109	Provincial Town	PV	1.000 EUR
5	2012	122	Provincial Town	PV	100 EUR
7	2011	146	Major City	PV	250 EUR
8	2010	148	Major City	PV	50 EUR
10	2011	166	Rural	Local heat, Biogas	500 EUR (x5)
6	2010	170	Rural	PV	100 EUR
9	2012	176	Provincial Town	PV	250 EUR
11	2009	247	Rural	PV	100 EUR
12	2012	276	Major City	PV	100 EUR
13	2009	391	Provincial Town	PV	500 EUR
14	2009	485	Rural	PV	500 EUR
15	2008	597	Rural	PV, Local heat, E- mobility	500 EUR (x2)

^{*)} Major City: >100.000 inhabitants, Provincial Town: 100.000–5.000 inhabitants, Rural: <5.000 inhabitants

The investigation of innergroup conflicts may appear precarious to an organization. However, given the request for the study, the majority of REC agreed to participate and allowed the investigation on the issue of conflicts in their group. In 2 cases the request was clearly rejected.

4 Methodology

Data on these 15 different RECs was gathered in a multi-stage iterative process. A *preliminary desk* research on each of the above-mentioned RECs was carried out to get a first insight in what they communicate, how they present themselves and their goals and to see if possible conflicts are already visible.

Participant observation was used to gather data during the annual members' assemblies. Each assembly was attended by two observers who set up chronological course protocols simultaneously. A joint protocol was formed afterwards. Protocols followed a defined guideline which included descriptions of the location setup, the attending persons and of the occurrences before and after the official assembly. The protocol focused on the topics discussed, verbal and non-verbal interaction between persons, arguments used and the solution or ending of conflict episodes and the atmosphere and visible mood of the involved actors before, during and after the interaction. After each observation, the research team discussed the observations and, where needed, the observation guideline was adjusted. As participant observers, interaction with the audience during the course of the official part of the assembly was kept to a minimum, despite a brief self-presentation upon request. Favourably, a position out of direct sight of the audience was taken.

The assembly protocols were analyzed with computer aided *qualitative content and text analysis*. During an iterative process, we generated a codebook to compile a set of ways of conflict handling used. The codebook generation process was inductive; to be extended with our findings as they occurred in the process. The empirical data was then analysed to find out patterns of conflict behaviour and the corresponding conflict styles. The findings on conflict handling were referred to the Thomas-Kilmann Model of Conflict Styles (Kilmann and Thomas, 1978). This model showed to have its limitations when used to describe the context of conflict handling in a multi-party group.

5 Results

5.1 Subjects of discussions within the annual assemblies

The procedure of an annual REC assembly is widely predetermined by German National Cooperative Law. The Chairmen of the Executive Board and Chairmen of the Supervisory Board must report on their activities in the preceding business year. If the general assembly accepts their reports it has to formally approve the actions of both institutions. Furthermore the results of the cooperative audit association have to be read out. If there are amendments of the statute or new elections of board members, the general assembly casts a vote through majority principle. The set of controversial issues discussed in annual REC assemblies is therefore often set in a determined field.

Despite the predetermined agenda, the general assemblies still revealed a variety of forms and arrangements. The number of participants ranged from 14 till 78 with participant quota from 10% to 49%. The assemblies sometimes took place in conference rooms of banks or in the kitchens of citizen centres. The time frame ranged from 53 minutes to 3.5 hours. The differing table arrangement let the members of the executive board and members of the supervisory board sit on a podium in a rather confronting way or – rather equally with normal members - on small tables amongst the other

members. Outside appearance of the members of the executive boards and supervisory boards varied from fine suits with name badges to decent casual wear, outdoor clothes and sneakers.

In general, many issues were discussed rather sober, with rational arguments, expressed as neutral questions or suggestions, without raised voices or personal accusations. Technical problems, low electricity production due to weather or the impact of frame conditions gave factual issues to explain little or negative revenues. Members mostly listened quietly, put factual inquiries and the members of the Executive Board answered in detail. The most important controversies appeared to be connected with the subjects of revenues, future projects and the amendments of the statute. The executive boards or supervisory board's proposals on the appropriation of the profit were discussed before the voting took place. As the political frame conditions force the RECs to search for new fields of business also potential business alternatives and their advantages and disadvantages formed topics on the agenda. Many RECs see themselves confronted with a shift from the rather low size solar power projects to wind power where the financial and professional requirements are often higher and members feel insecure concerning the consequences and capabilities of the REC. Through the development of the REC amendments of the statute may become necessary. They are related to the field of business, the decision-making of the CEB or shift of addresses etc. Aside from these common topics there were various individual conflict issues that comprise the workload of the executive board, members' access to results of the audit report or the discussion on political statements of the REC.

In the following chapter we will present selected conflict issues and their handling within the general assemblies that show typical features.

5.2 Conflict episodes

5.2.1 Describing conflict handling

The analysis of the empirical material showed limitations of the Thomas-Kilmann model of conflict handling and made adjustments necessary. It includes the concern for inter-party relationships while evaluating conflict handling, but it does not differentiate between process and outcome.

We therefore introduce process-related conflict style and outcome-related conflict style analysis which lead to more comprising results. Due to the outstanding importance of intragroup relationships in an REC it is necessary to take into account what conflict handling means for the group and for the individual.

The *outcome* of a conflict episode is the summary of a conflictive episode. It forms the impression of the conflict handling used that the involved parties take home. The issues at stake may or may not have been decided, but the outcome is evaluated under the premise that a party was able to take part and to feel that their interests are considered and adequately represented in the decision-making process. As described above, a REC lives by the perception of its members who need to be under the impression that their interests are still realizable in their organization. This premise is used to value the outcome of a conflict episode in respect to the conflict handling observed. The outcome of a conflict episode evaluates the episode as a whole, not as the sum of its pieces, which may be labelled differently. Put simple, a win-lose situation can lead to a member never coming back, or integrating him into the group even if his agenda is not fulfilled, depending on the way a conflictive situation is handled. Outcome in terms of conflict handling is not to be confused with outcome in terms of a decision-making process, where a voting process per se is a competitive way of conflict handling.

While in the *process* of negotiating conflictive matters, the contrary positions are postulated and arguments are put into the field. The negotiating process shows if differences are merely a matter of asymmetric information or if the different positions are equally realizable or not. It is also used by the involved parties to gain advantages to realize their agendas, and to find out where the boundaries are that oppose their agendas. During the process, conflict parties can apply varying conflict styles.

The conflict episode ends when the subject is no longer discussed, in the context of an REC often when a voting process is completed.

The setting in which our observations took place favors a regulated conflict handling, as the process of an REC's general assembly is predetermined by cooperative law and it is common to decide on topics prepared by the Executive Board by majority vote.

We illustrate our findings with four exemplary episodes taken from the protocols, showcasing typical conflict handling in RECs' annual assemblies on a variety of recurring topics.

5.2.2 Example 1: Unmet expectations on economic revenues

Economic revenues have been discussed at large in nearly all occasions. The first years of existence of many RECs have proven to be difficult in relation to economic revenue. In general, it was to be noted that expectations on economic revenues were present, but in many cases not played a major role for the members.

This example is taken from a protocol of a REC which is located in a major city. Its field of business is power generation by means of solar energy which is sold to the grid. The members have invested money in the project, but do not know each other from other contexts. The Executive Board and the Supervisory Board are composed of professionals with backgrounds in the financial and political sector.

The topic is the investment strategy of the REC. It has become obvious that there is a lack of new projects which leaves the REC without options for investment. That means that a part of the members' paid in capital sits on bank accounts which carry little or no interest. This has led to a disproportion between the members' revenue expectations and reality.

Extract of protocol

M: REC Member

CEB: Chairman of the Executive Board CSB: Chairman of the Supervisory Board

begins with a rather cynical remark about the "pleasing" CO₂ reductions achieved by the REC. "But how does it go on from here? We were promised a 5% revenue at the founding, that is nowhere in sight! ... There is a disproportion between the investments and the money on the bank!" waves his hand at the board members "We are patient, but 1.7% is not enough, we want to see the light at the end of the tunnel!"

The assembly murmurs in approval

- **CSB** thanks M1, presses a bit forward to the microphone, pushing the CEB aside: "You have taken from the report that we are in contact with ..."
- **M1** cuts him off: "How high is the investment!?"
- **CEB** thanks M1 as well, and then explains the financial situation and the REC's plans. It turns out that the members are not well informed about the latest developments.

CSB whispers in his ear

CEB explains the feed-in tariff degression, which he holds responsible for the development of the revenue: "We are dependent on the Renewable Energies Act." He then points out that they are all voluntary workers: "We need to see what is possible."

CSB pitches in: "The light at the end of the tunnel gets brighter!" then ends the discussion.

M1 does not seem to be content with this.

The *outcome* of this episode leaves an unresolved conflict. The positions of the involved parties are not equally realizable, indicating a competitive conflict handling style. It is clear that the members do not see their interests matched and the board members are not able to give them the impression that this will change in the future. Possible resolutions of this conflict can lead to a new election of the Executive Board or Supervisory Board or members leaving the REC.

This episode shows the use of mainly competitive conflict handling style during its process. Member 1 begins by blaming the Members of the boards for the current fiscal situation, which depicts a violation of given promises. He puts his relationship with them at risk, focusing on his agenda only. He only leaves a small door open for compromise for the other party, as he refers to his patience. As he speaks as if his position is shared by the majority of the group, he increases the pressure on the other party. The group backs him up, so he seeks further confrontation, steering for a win-lose situation. This confrontation puts the CEB and CSB in a difficult position, as their competence and credibility is directly challenged. The CEB shows a conflict handling style that includes elements of compromise and accommodation. He tries to gain the members' understanding by explaining the motives of his actions and the boundaries of his possibilities. While so, he takes the blame for the current situation and does not offer a solution. Thus he leaves the relationships between him and his members undamaged, while taking damage to his own professional reputation. The CSB reacts in a competitive way, trying to put the member's position aside. He does not accommodate and does not try to explain the current fiscal situation. Although his actual position as member of the Supervisory Board is to represent the members' interests against the Executive Board, he shows no concern for it and ends the discussion without offering a compromise.

5.2.3 Example 2: Decisions on future business fields

Especially REC that have been active exclusively in feed-in-tariff-based solar power projects so far, are searching for new fields of business as the economical basis through the feed-in-tariff (FIT) is not available any more. The Executive Board members of various RECs mention potential alternatives such as activities in the fields of contracting and marketing of electricity (instead of feeding in and receiving a FIT), energy efficiency or water and wind power. Wind energy is often discussed, but it means a shift to higher financial and professional requirements and in the case of cooperation with external companies such as local energy providers less influence on decisions. Opinions often differ on the consequences among the REC members. Disagreement often exists on the question if the REC has the necessary capabilities for these new types of projects.

In the selected episode, the assembly's participants pose various questions after the Chairman of the Executive Board's annual report. A – on the whole – 40 minutes discussion emerges when one member wants to know more about future projects and the Chairman of the Executive Board's plans to realize large scale projects such as wind energy. Is the REC capable to conduct such projects? Arguments are uttered rationally and in a sober tone, yet there are also emotional comments and

concern. The Chairman of the Executive Board registers the opinions openly and makes little attempts to dominate or influence the exchange, enough time and space are given for all sides to speak up. A guest from another REC who has more experience joins the discussion strongly. When a circular discussion is imminent an elderly man raises his hand. He feels concerned as it is their own money that would be invested and seeks to be involved in the decision. By admitting that he lacks the knowledge to evaluate the issue and further planning he suggests asking the Chairman of the Executive Board to prepare a decision basis for the general assembly. The vote is consentaneous.

M: REC Member

MB: Member of the Executive Board CSB: Chairman of the Supervisory Board

Extract of the protocol

[...]

(male, age mid-50, calm, but a little skeptical tone of voice): "Wind energy on average deals with power of 3 Megawatt which signifies costs of 4, 5 millions of Euro. If the REC already struggles with losses of several thousand Euro through solar power projects, I wonder how one plans to cope with wind power stations. Equity-ration of 25%, 30% here would mean at least gathering one million Euro. Political developments in Berlin would also have to be considered. My question: Is there already a concrete planning on this?"

MB1 (female, age early 50ies, a little hesitating): "We have been thinking about this and evaluated potential legal forms of companies." She explains two alternatives, constructs with a limited liability company or a limited partnership with a cooperative which she personally would prefer.

M2 (male) "This would mean a loss of influence for the Cooperative."

MB1 "Not completely, the management would stay in the hands of the Cooperative."

M3 (male, age mid-50, a guest from a different REC): "But it would be a relocation of risks."

M4 (female, age mid 60): "It would mean legal liability."

MB2 (male, age early 50, rapidly talking) states that the acquisition would be on the way, it would be too early to be talking about this.

(an older member, speaking in a calm, polite and in a well-educated manner, appearing experienced and self-confident) speaks up and states that he was not able to add to the discussion, as he would lack a knowledge base on this. As it would be their money and they would possess a right on information, he suggests that the assembly mandates the Executive Board with the task to gather the necessary information on this to be presented on the next assembly.

MB1 (a little quieter) puts in that waiting another year might be a bit long.

CSB (man, age early 50) agrees and points out that it would be good to seize the time; when new changes of the Renewable Energies Act were put into place it would be well to be prepared and capable of acting. He suggests a new assembly sooner, in summer.

The following voting process leads to an agreement to the mandate as discussed. Another 30 minutes of discussion follow. When M3 starts an elaborate speech about the risks of such big projects and the ideal of Cooperatives which does not have its focus on maximizing economic factors, a normal

member reminds him that the topic has already been agreed on.

[...]

In this episode a normal member canalizes the controversial discussion on potential future business projects into a ballot and proposal towards the MBE to prepare a respective informational basis for the general assembly. It is accepted and voted for unanimously. Therefore the *outcome* of this episode can be considered as a collaborative conflict handling as the incompatible agendas of all parties have been transformed into a common agenda. The relationships have not been damaged and no party had to forcefully accept an agenda with which they not agreed.

In the process of this episode the topic revolves around the risks involved in erecting a wind turbine and the financial capacities of the REC. The discussion is initiated by one member who voices his concern against the idea by stating clear arguments. He displays a collaborative attitude, it becomes clear that he is taking care not to offend the MEB to keep their relationship intact. He accepts the proposal that is being formed, as he sees his concerns taken seriously. Other members contribute further details, but also possible consequences that might harm the REC. An external guest adds further expertise to the discussion, voicing potential risks. They express their concerns in a calm and non-offending way, reflecting on the arguments for and against the idea, trying to reach a collaborative outcome.

The MEB leave space for an open discussion on the matter, explain the possible options to the members. When a proposal emerges from the membership, they fully accept it even if this means a delay in the decision-making process, showing a collaborating conflict handling style.

The CSB also uses a collaborating conflict handling style, concretizing M5's proposal.

5.2.4 Example 3: Amendment of statute: suggestion to change the form of the annual general assembly

Access to information and participation in the decision-making process directly or indirectly played a role in various discussions during the annual general assembly. Detailed inquiries of member's on parts of the annual reports showed attentiveness and interest and the importance of the forum of the general assembly. REC members appeared to be conscious of the particular values and rights within the cooperative organization. The obligations of the Executive board, the role of the general assembly, control functions, mutual promotion of the members or democratic rights to vote were known and came to discussion when the Executive Board e.g. suggested changes concerning its authority in the decision-making process independent from the general assembly.

The following episode deals with the MEB's suggestion to change the conduction of the general assembly. A very successful metropolitan REC holds its annual general assembly. Out of the 140 members 17 people take part. The assembly is set in a kitchen of a citizen's center. After long and detailed presentations on past and current projects, the CEB suggests two amendments of the REC's statute. While the first rather technical adjustment concerning the business field is accepted, the second amendment concerning the possibility to conduct future annual assembly in online form (no physical assembly) leads to a long discussion. Various participants straightly express their dislike. CEB 1 tries to convince the participants through arguments. He emphasizes the REC's modernity and openness to innovative issues and the fact that many members may not participate because they live too far away and therefore are disadvantaged. While speaking he stays sober in tone and attitude. The CSB finally concludes the members' doubts. The CEB 2 convinces CEB 1 to give in and accept the member's opinion. The amendment of the statute is not voted. Participants are conscious of their

needs and rights. Facing the CEB once a year physically is considered important. Keeping polite manners they utter their opinion directly, and even achieve to outvote the CEB. The CEB leaves room for a 30 minutes discussion, tries to convince and finally accommodates. Though he is not happy he keeps sober in his emotional state.

In the end, the decision is postponed; a proposal for a preliminary approval is rejected.

Extract of protocol

M: REC Member

MB: Member of the Executive Board CSB: Chairman of the Supervisory Board

[...]

MB1 (male, age 40) presents the suggestion of the amendment of the statute. "The point is that today we are not 140 members gathering in our assembly, but only 17." That would be due to the distance. Members would live nationwide, that would be too far. Therefore they would propose to hold the assembly online. (...) Of course they would consider barrierfree access. "I think, that fits with us". Authenticity, concerning the voting process, would of course being taken care. "When technical solutions are readily installed, an online-assembly will be a helpful tool."

M1 (male, early 50, long hair): "I'm against it. There's also people in the town not being here today. I am for the fact to meet up once a year, to physically meet people."

MB1 "We don't want to substitute(!) the physical assembly!"

M2 (male, 35 yrs) suggests a "real" assembly which is transmitted by video.

MB1 points out that this would be time-dependent again.

M3 (male, 45 yrs.) "But discussion emerges rather in a personal meeting".

M1 "Where is it written? The fact that a physical general assembly is not being substituted?"

MB1 "It says 'can".

M1 "I would like to have a clear phrase stating that a physical assembly takes place", that would be his preference, but "of course that is a majority decision".

MB1 "We are at one on this! But one has to think big and into the wide open space! At last, we decide on this together."

A 30 minutes discussion follows. Possibilities of having an online assembly before the actual assembly and other forms are discussed, but there are difficulties that make this seem slightly possible. Members agree on the term "complementary", they are not willing to give up a physical assembly.

MB1 "Actually, I have a different point of view. We don't know what the future holds for us, so I would rather prefer an "open" formulation, without "complementary.

CSB points out that somebody has to decide on this

MB1 looking at the assembly: "Who would vote for "complementary"? Just to get an opinion overview."

8 persons, including the other Member of the Executive Board, vote for "complementary". Nobody votes against it, some members abstain from voting.

MB1 "Then I vote for "complementary" as well."

After this, he keeps on trying to convince the assembly to accept the idea of an online assembly, but technical and legal difficulties are put into the field.

- **CSB** "All right, it looks as if there are three variants to be discussed. Let's just go over them again (at another time)."
- **MB1** "Maybe we get this done until October." He resumes that everybody agrees to take this point out of the proposed changes of the bylaws for now.

[...]

The *outcome* of this episode depicts – in strict sense - a competitive conflict handling as a ballot is suggested that only allots one standpoint to be enforced. The position "online assembly" is incompatible towards the wish to stick to a physical assembly and therefore provides an institutionalized conflict handling channel that leads to a win-lose-outcome. Concerning the primarily planned voting on the amendment of the statute, the members of the executive board have to finally accommodate their position, as the members enforce their wish to hold up a physical meeting. Yet, the conflict may only be postponed, as the MEB and MSB may readjust their proposal and present it again at another time.

The *process* of this episode shows that the opposing parties stand firm for their positions. MEB1 has a clear agenda that he tries to fulfil, using rational arguments, anticipating members' concerns and explaining his motives. He tries to convince the members for the upcoming vote and tries to keep opposing positions down. His use of conflict handling style displays competitive elements where he tries to reject members' arguments with counter-arguments. As it becomes clear that his idea will not be accepted by the members as is, he switches to a more compromising conflict handling style. He is ready to accept all parts of the other party's agenda that do not interfere with his idea. Elements of collaboration can be seen when he admits that a decision will only be made together. While fighting for his position, his attitude towards the members stays friendly, allowing for a factual conversation. When in the end his original proposal is outvoted, he does not give up on the topic, but keeps up arguing for it.

A great deal of the members participates in a lively discussion on the topic, adding constructive proposals. Although they are clearly against MEB1's idea, they employ a compromising way of conflict handling, trying to integrate parts of his proposal into the decision. They do not let MEB1 convince them to give up their interests at stake where it really matters to them. In the voting process which can be seen as a competitive element of conflict handling, they outvote MEB1, rejecting his idea at this time. MEB2 joins the discussion and moderates between the two parties, in the end joining members' opinion.

The other part of the assembly stays neutral, choosing an avoiding style of conflict handling. They do not add to the discussion even after MEB1 emphasizes that the decision will be made together.

The CSB employs a compromising style of conflict handling, postponing the formal decision on the topic to a later time. This allows MEB1, who is not successful with his proposal at this time, to further work on it and present a revisited proposal at a later time.

The process does not appear to harm the intragroup relationships. Even when MEB1 is voted down, the applied conflict handling styles do not lead to a win-lose power struggle although competitive elements exist. Group conversation continues as normal with the following discussion points.

5.2.5 Example 4: A difficult member to deal with

In any group there may be protagonists that appear inconvenient for the rest of the group. We encountered several incidents where members voiced their concerns in an offensive tone. The issues that were subject of discussions showed a certain mistrust and dissatisfaction, often towards the chairman of the Executive Board. How to react in order not to let the situation escalate? It could often be observed that third persons – not being involved into the conflict line – tried to help relieving tension by making constructive suggestions or defending the offended persons.

This example is taken from a protocol of a small, rural REC whose fields of business activity are heat and power generation by means of a biogas plant. The outstanding is that nearly all its members are customers as well, as they receive the generated heat to heat their houses. Of the village's inhabitants, nearly 50% are members of the REC. Founded in 2010; the REC generated its first surplus in 2014, when the protocol was taken.

The Chairman of the Executive Board presents the board's proposal for this year's surplus utilization. The REC has constructed a local heat distribution system for the village, for which the REC has borrowed money from an external investor. The investor is entitled to revenue which shall be paid out for the first time this year. One of the members is not content with this.

Extract of protocol

M: REC Member

CEB: Chairman of the Executive Board

M1 criticizes the CEB's proposal for a payout to the external investor. He begins with critical inquiries: "What is all this good for?", and displays his reasons: "they are getting a dividend [comment: the external investors]; we pay the tax, which is not what a cooperative is meant to be!"

While talking, he looks directly at the CEB and underlines his words with strong gestures. From time to time, he looks at the rest of the board members and the assembly, which is mainly behind him.

- **CEB** replies in a decided tone and displays his arguments for borrowing money from the investor in the first place: "Without him, we would never have made it!" and looks directly at the speaker. In the course of the discussion he acknowledges the member's financial competence and offers him an extended inclusion into the RECs business processes.
- **M1** is not calmed down by this and repeats his reasons, he does not acknowledge the CEB's reasons at all.

The assembly starts to get agitated, murmuring.

- **M2** suddenly bursts out: "Percy*, we all heard this three times before, this leads to nothing!" His tone of voice is irritated, he is speaking quite loud. He turns halfway to M1 and waves his hand at him.
- M1 answers irritated: "You have no idea of taxes...!" talks faster and louder, insulting M2.
- **CEB** steps in and breaks off the dialogue, stating that "the arguments have now been exchanged!" He reminds the parties that there will be following a voting on the topic.

M1 does not seem to be satisfied, but does not keep talking.

In the following voting process he is the only one voting against the CEB's proposal.

*name changed

[...]

The *outcome* of this episode leaves Member 1 alone, his agenda is refused and the CEB's proposal fully accepted. The CEB has shown that he cares for an integration of the members' interests but is also capable of realizing and defending the majority's interests. Intergroup relationship ties are strengthened with a possible loss of one member. Even if it does not become clear if the CEB's business decision was in fact the best for the REC, the members clearly see their interests matched and support their CEB who is able to fulfil his agenda completely. The outcome of this conflict episode indicates a competitive conflict handling style. Member 1 acts as a common counterpart for the rest of the assembly, which lets the others stand together.

The negotiating *process* of this episode shows some different conflict handling styles. Member 1 sees his interests clearly violated and is seeking a direct confrontation, attacking the CEB which he holds responsible for the current situation. During the process, he does not acknowledge the other party's position and does not show concern about the possible damage to his relationship with the CEB. The focus of his actions is on his needs and his desired outcome. He is orientated towards a win-lose power struggle, thus indicating a clear competitive conflict handling style. Member 2, in interaction with Member 1, also shows a competitive conflict handling style, as he denies his interests and tries to block him off. The CEB, on the other hand, first tries to offer a compromise, seeking a way to keep his business decisions in place while eliminating the threat of future attacks by further incorporating Member 1 into the decision-making process and leaving the relationships undamaged. As this is not successful, he switches to a competitive conflict handling style, giving up the concern for his relationship with Member 1 for the sake of his agenda. He terminates the discussion and initiates the voting process, as he is sure the majority will back him up. The process is characterized by competitive elements.

5.3 Tendencies among conflict handling in RECs

The formal procedure of a general assembly implies a setting that favours a regulated conflict handling. An all accepted set of agenda issues, a defined order of discussion and a voting process with clearly defined majority principle provides an institutionalized conflict handling. Although the decree and voting itself may theoretically lead to win-lose-outcomes between opposing parties, conflict handling exerted by REC members in the arena of the general assembly still shows strong endeavors to consensual outcomes. Crucial votes or speeches with harsh tone are hardly to be observed. Rather a general mutual respect and commitment to the rules of the assembly as the above mentioned agenda, formalities on the voting process and acceptance of majority principle, granted times to speak and acknowledged social manners were displayed. This holds for members in all positions. Members of the Executive Board showed an attitude of flat hierarchy and partner-like relationship towards the members as the use of first names, equal times to speak, attentive listening to their remarks and seating arrangements amongst the normal members signalized. Basic members on the other side appeared to be attentive, responsible, mature and participating. Controversial discussions were led by objectivity and search for solutions with regard to content. We assume that the composition of the members may influence this attitude and behavior. The members of REC taking part in the general assembly were typically elderly people, men, technically interested and well-educated persons and may form a cultural milieu that affects social behavior and handling with different opinions.

Yet in a few cases members of the Executive Board also appeared to face diverging opinions in a more forcing and suppressing manner. Members who expressed critical views were tried to be pushed aside by simply posing a counter remark with converse statement or by quickly leading over to another person's question or the next agenda topic without leaving space for further explanation or discussion. This often happened when the time prepared for the general assembly was short yet it also went along with hierarchal seating arrangements and may show a self-perception of management. On the other side basic members in a few cases also showed rather offensive and rude remarks e.g. by naming the conclusions or behavior of Executive Board members as false or grouching and arguing rather emotionally than rational with a diffuse concern and fear towards future developments. It could be observed that in these moments confusion and disturbance was brought into the general assembly. Generally in such cases, the rest of the group may either be infected by the remark and join the critics or it might isolate the person who is uttering his critics. In the observed assemblies we mostly found calming forces to emerge. Especially third parties tried to dissolve the tension by either giving rational arguments and trying to evoke comprehension for the offended side or by integrating the offending person by canalizing the conflictual emotion into objective matters and solutions, or by shifting the point of attack from inside members to outside antagonists.

Overall the conflict handling observed in the general assemblies showed conflict handling that distinctively tries to keep relationships between the REC members intact and achieve most possible consensus in the group by giving time and space for discussion and a chance to converge different opinions.

Concerning the conflict handling related to the Thomas-Kilmann model, the full range of conflict handling styles can be found in our sample, yet a stronger tendency towards cooperativeness than towards assertiveness is at hand. Our distinction between process-related conflict handling and outcome-related conflict handling helps to draw a clearer picture of why conflict handling plays an important role for the well-being of an REC's members.

Outcome-related conflict handling style showed a clear preference for collaboration. The majority of conflict episodes turned out to be handled in a collaborating matter. It is clearly visible that a high concern for collaborative solutions exists among the members of the boards and basic members of most of the RECs we observed. Even after heated discussions and strong opposition, contestants rarely lost focus on coming back to solutions that did not harm intragroup relationships. Overall, the members of the Executive Board had a good sense for members' desire to be part of the decision-making process. This leads to solutions that reflect the cooperative principle of democratic decision-making. Where this was not the case, members showed a lesser degree of confidence towards the board members. The preference for integrative solutions was in many cases kept even if it slowed down the actual process of decision-making. The other four conflict handling styles only play minor roles in the outcome, with a slight preference on avoiding and competing conflict handling styles. Yet only to focus on the outcome would not cope with the process and attitude in the decision-making that is found in an REC. Therefore we included the whole process of a conflict episode into the analysis.

Process-related conflict handling was dominated by competitive and compromising conflict handling styles, with avoiding conflict handling style is less used and accommodating and collaborating conflict styles are only playing a minor role. It was very common to see parties switch conflict handling styles during the process. It could clearly be seen that members who only had concerns for their own agenda differing from group opinion were prone to segregation from the group if they were not able to lay down their competing style of conflict handling.

6 Conclusions

Conflict handling itself has a great effect on an REC's member well-being. Successful conflict handling therefore is not only important for the ability of the Executive board to fulfil its role as a manager of a company, but also on the lasting support by the members. The observations taken in the general assemblies of the RECs displayed that members mostly handle conflicts with a strong tendency for collaborative styles with an interest in mutual profits and consensual outcomes, commitments to the assembly's rules and social manners and on not harming the relationships among the members. In only a few cases more competitive style of conflict handling was to be observed and a hierarchal instead of an partner-like relationship was performed. A closer look at the influence of context factors such as the arrangement of the assemblies concerning the size, location and technical equipment and the composition of the members concerning their age, sex, educational background and local social context will be part of our upcoming research. The self-perception of the board members that might be strongly influenced by their professional socialization and working culture in their main job seem to have influence as well. It appears important to also investigate how time since foundation plays a role as certain stages of development in organizations can be related to a specific set of conflicts. The growth in numbers of members and projects requires development of organizational structures and work division while the decreasing feed-in tariffs make acquisition of new projects more difficult over time. Interpersonal relationships may decrease in larger groups. Different local contexts may result in different degrees of interaction and overlapping of interest groups and social networks that affect conflict handling.

The Thomas-Kilmann model of conflict modes showed to be insufficient to properly describe the complex of conflict handling styles in the given context. It was developed focusing a two-party superior-subordinate conflict situation which is not applicable to the situation found in a multi-party, atlevel context of a Cooperative. It was designed to describe an individual's behavior in a conflict situation, yet we often experienced a shift of conflict handling styles of a single individual within a single conflict episode. What seems of more importance to us is the situational outcome, which may be described differently than the mere sum of conflict handling styles experienced during an episode. This is of direct importance for the evaluation of the REC as an organizational model and its implications for conflict handling. Our findings show that even in conflict episodes characterized by competitive conflict handling, a collaborative outcome is commonly found.

Eventually, a development of criteria that allow to measure the "functionality" and "effectiveness" (Thomas *et al.*, 1978) of the different conflict handling styles in the context of RECs will be needed to give further advice to stakeholders on how to manage conflicts.

A clear contextual relationship between the formal and informal structures including cooperative values such as solidarity and the democratic idea and the preference of conflict handling styles needs further investigation, which includes information gained outside the context of the annual assemblies.

References

- Blazejewski, S. (2011), "Conflict in headquarters-subsidiary relations: a critical review and new directions", in Dörrenbächer, C. and Geppert, M. (Eds.), *Politics and Power in the Multinational Corporation: The Role of Institutions, Interests and Identities*, Cambridge University Press, pp. 137–165.
- Boone, C. and Ozcan, S. (2014), "Why Do Cooperatives Emerge in a World Dominated by Corporations? The Diffusion of Cooperatives in the U.S. Bio-Ethanol Industry, 1978-2013", *Academy of Management Journal*, Vol. 57 No. 4, pp. 990–1012.
- Darr, A. (1999), "Conflict and Conflict Resolution in a Cooperative: The Case of the Nir Taxi Station", *Hum Relat*, Vol. 52 No. 3, pp. 279–301.
- Deutsch, M. (2005), "Cooperation and Conflict. A Personal Perspective on the History of the Social Psychological Study of Conflict Resolution".

- Deutsch, M., Coleman, P.T. and Marcus, E.C. (2006), *The handbook of conflict resolution: Theory and practice*, 2nd ed, Jossey-Bass, San Francisco, CA.
- Dorow, W. and Grunwald, W. (1980), "Konflikte in Organisationen", in Neubauer, R. and Rosenstiel, L.v. (Eds.), *Arbeit und Organisation*, *Handbuch der angewandten Psychologie*, Verlag Moderne Industrie, München.
- Dreu, C.K.W. de and Beersma, B. (2005), "Conflict in Organizations: Beyond Effectiveness and Performance", *European Journal of Work and Organizational Psychology*, Vol. 14 No. 2, pp. 105–117.
- Glasl, F. (2011), Konfliktmanagement: Ein Handbuch für Führungskräfte, Beraterinnen und Berater, Organisationsentwicklung in der Praxis, Vol. 2, 10., überarb. Aufl, Haupt [u.a.], Bern [u.a.].
- Hagedorn, K. (Ed.) (1997), *Agrargenossenschaften: Mitgliederinteressen und ökonomische Perspektiven*, Vol. 39, Institut für Genossenschaftswesen Berlin, [S.I.].
- Hernandez, S. (2006), "Striving for Control: Democracy and Oligarchy at a Mexican Cooperative", *Economic and Industrial Democracy*, Vol. 27 No. 1, pp. 105–135.
- Hoffmann, E.A. (2005), "Dispute Resolution in a Worker Cooperative: Formal Procedures and Procedural Justice", *Law and Soc Rev*, Vol. 39 No. 1, pp. 51–82.
- Kilmann, R. and Thomas, K.W. (1978), "Four Perspectives on Conflict Management. An Attributional Framework for Organizing Descriptive and Normative Theory", *Academy of Management Review*.
- Mojtahed, D. (2007), "Conflict Management of Cooperative Organizations in Contemporary Iran: A Review Analysis", *Publ Organ Rev*, No. 7, pp. 163–180.
- Müller, J.R., Dorniok, D., Flieger, B., Holstenkamp, L., Mey, F. and Radtke, J. (2015), "Energiegenossenschaften – das Erfolgsmodell braucht neue Dynamik", *GAIA*, Vol. 24 No. 2, pp. 96–101.
- Müller, J.R. and Holstenkamp, L. (2015), "Zum Stand von Energiegenossenschaften 2014. Aktualisierter Überblick über Zahlen und Entwicklungen zum 31.12.2014", *Arbeitspapierreihe Wirtschaft & Recht*, No. 20.
- Radtke, J. (2014), "A closer look inside collaborative action: civic engagement and participation in community energy initiatives", *People, Place and Policy Online*, Vol. 8 No. 3, pp. 235–248.
- Spear, R. (2000), "The Co-operative Advantage", *Annals of Public and Cooperative Economics*, Vol. 71 No. 4.
- Stappel, M. (2011), "Genossenschaften in Deutschland. Eine Studie aus Anlass des Internationalen Jahres der Genossenschaften", *DZ Bank Research Konjunktur und Kapitalmarkt*, pp. 1–56.
- Thomas, K.W. (1992), "Conflict and conflict management: Reflections and update", *Journal of Organizational Behavior*, Vol. 13 No. 3, pp. 265–274.
- Thomas, K.W., Jamieson, D.W. and Moore, R. Kenneth (1978), "Conflict and Collaboration: Some Concluding Observations", *California Management Review*, Vol. 21 No. 2, pp. 91–95.
- Volz, R. (2012a), "Bedeutung und Potentiale von Energiegenossenschaften in Deutschland. Eine empirische Aufbereitung", *Informationen zur Raumentwicklung*, No. 9/10, pp. 515–523.
- Volz, R. (2012b), Genossenschaften im Bereich erneuerbarer Energien: Status quo und Entwicklungsmöglichkeiten eines neuen Betätigungsfeldes, Forschungsstelle für Genossenschaftswesen an der Univ. Hohenheim.
- Wall, J.A. and Callister, R.R. (1995), "Conflict and Its Management.", *Journal of Management*, No. 21, pp. 515–558.
- Yildiz, Ö., Rommel, J., Debor, S., Holstenkamp, L., Mey, F., Müller, J.R., Radtke, J. and Rognli, J. (2015), "Renewable energy cooperatives as gatekeepers or facilitators? Recent developments in Germany and a multidisciplinary research agenda", *Energy Research & Social Science*, Vol. 6, pp. 59–73.