

The Role of Social Capital in Agricultural Collectives: A Social Network Analysis of the Agricultural Nature and Landscape Management Scheme in the Dutch Province of Limburg

Richard Berner*, Rena Barghusen**

*Humboldt University of Berlin, DE | ** Leibniz Centre for Agricultural Landscape Research (ZALF)

This **research note**¹ investigates the system of collective contracts for AECM² in the Netherlands, which was researched through a case study in the Dutch province of Limburg. It provides a summary for interested professionals, practitioners, and academics, and may inform national and European policy targeting the design of Agri-Environmental Climate Schemes.



Key Points

- In 2016 the Netherlands implemented a nationwide collective scheme for AECM, called Agrarisch Natuur en Landschapsbeheer (ANLb)
- Forty agri-environmental collectives exist that are intermediaries between farmers and the government
- One of these collectives “Natuurrijk Limburg” and its surrounding structure were analysed by the means of a Social Network Analysis
- Results show: The collective is at the centre of a complex system of collaborative governance, in which various public and private actors are involved
- There is more exchange and interaction between farmers than in the old policy system
- Being organized in a collective motivates farmers to participate in the program
- Although some governance tasks were shifted from government to the collective, the collective is not perceived as pure authority but as a farmers’ organization
- Trust between the organization and its members needs to be maintained, involvement of the members strengthened to foster the positive effects of the new policy system
- External relations need to be strengthened, because they are important for access to resources like funding or knowledge

¹ This research note is written based on a master thesis, whose full text is available at the following link:

<https://doi.org/10.18452/23784>

² See the glossary on the Contracts 2.0 website: <https://www.project-contracts20.eu/glossary/collective-contractual-models/>

Context and research question

Since 2016 it is no longer possible to benefit from the payments through a contract as a single individual. Instead, this is only possible through a collective contract. The EU Rural Development Regulation introduced the possibility of group applications for AECS in 2014 (Dupraz and Guyomard 2019). The Netherlands is so far the only state that has implemented a nationwide collective scheme. The collective AECS goes under the Dutch name “Agrarisch Natuur en Landschapsbeheer” (ANLb - Agricultural Nature and Landscape Management).

The scheme follows a so-called “front-door – back-door” approach (Terwan et al. 2016). The government defines national targets and offers a catalogue of possible conservation activities. It then signs a contract with a regional collective agreeing on certain goals on landscape level. While there is only one contract concluded between the authorities and the collective (through the “front-door”), the collective makes individual contracts with each farmer through the “back door”. The collectives coordinate the activities on field level, giving advice, taking care of the monitoring, the payments, and the potential sanctioning (Westerink et al. 2020). Thus, the forty existing agri-environmental collectives in the Netherlands function as an intermediary between farmers and the government. They self-organise biodiversity conservation activities such as for instance the protection of meadow birds or the maintenance of landscape elements on farmland (Westerink et al. 2020). Through the habitat based cross-farm approach the environmental impact is supposed to increase, allowing also for more flexibility for the farmers and lower implementation costs (Terwan et al. 2016).

This research examines one of the collectives as a case study. Within the collective we observe a case of agricultural collective action. This collective action is induced and supported by the ANLb policy approach. It is embedded into a multi-actor system of collaborative governance, thus a network of governmental and non-governmental actors that work together on different tasks with the goal to implement the program successfully (Westerink 2017).

Previous research has shown that social capital is an important resource and highly relevant for the effective functioning of collective action and collaborative governance arrangements (Ostrom and Ahn 2009; Oh and Bush 2016). While there is an ongoing debate about the term of social capital, we follow a definition by Westerink et al. (2020, p. 391), who see it as “soft qualities of networks and relationships that enable groups to accomplish things together, including trust, access to knowledge and support, shared values and the capacity to learn and innovate as a group”. For this research, three forms of social capital were of particular relevance. Bonding social capital, associated with inward-looking networks, bringing together similar kinds of people (Fisher 2013). It evolves within groups that are rather homogenous, where members are similar in their socio-economic status, attitudes, status of information and resources and might form similar views over time (King et al. 2019). Bridging social capital, which concerns outward-looking networks and connections among different groups of people (Putnam 2000; Baylis et al. 2018). These actors are different in their social identity, but might share common interests or goals, which enables them to exchange novel resources (King et al. 2019; High et al. 2005). And finally linking social capital, which is about vertical connections, between actors with different levels of power and influence. It can mean connections of actors who are politically or financially more dominant or could occur between institutions on a different hierarchical level (Woolcock and Sweetser 2002; Dahal and Adhikari 2008).

Westerink et al. (2020) investigated how the since 2016 emerged collectives in the Netherlands navigate their identity in interactions with public authorities and how they manage potential trade-offs between different forms of social capital. The collectives adopted characteristics of public agencies in order to meet the demands of the Dutch government and the EU legislation. But did the collectives maintain their bonding social capital within as well as developed linking and bridging social capital with public authorities and other parties?

The research was guided by the following two research questions:

1. Who are the central actors and how do they interact?

2. In which way does the presence of social capital influence the functionality of the network?

The second question was addressed through the sub-questions: What bonding social capital exists between homogeneous actors? And what bridging/linking social capital exists between heterogeneous actors?



Common kestrel (left) and common linnet (right) in the landscape of Limburg

Methods

This research focuses on one of the forty existing collectives, located in the South-east of the Netherlands. The collective Natuurrijk Limburg covers the whole area of the Province of Limburg and has about 1300 members, making it the largest of all the Dutch collectives. It was assessed as a suitable case because of its large size and its relatively short existence (founded in 2015), making it interesting to examine social capital within because people might not know each other well and only have little experience in working together yet.

This research uses Social Network Analysis (SNA) which is an umbrella term for a body of research methods that try to analyse underlying structures of social networks. These are sets of various actors (individuals, groups, or organisations) that have some relationships or interactions between them (Tabassum et al. 2018). SNA has proven to be useful in a number of studies related to social capital (e.g. Clark 2010; Díez-Vial and Montoro-Sánchez 2014, Birendra et al. 2018).

As a means of SNA, the so-called Net-Map Method is used. While conducting a guideline-based interview, the interviewer visualizes network structures together with the interviewee on a large sheet of paper (Schiffer and Hauck 2010). Thereby important actors, as well as their formal and informal connections, motivations and influences are enquired. Normally using paper and sticky notes, due to the COVID-19 pandemic this method was carried out with the help of online interviews and an online visualisation tool. Relevant interviewees were identified through referral sampling and eight interviews were conducted in total. Thereby we ensured to cover different views from farmers, representatives of the collective as well as governmental organizations. Five respondents are on the provincial level in Limburg, while three are on the national level of the ANLb.

All interviews were recorded with the interviewees' consent and later transcribed. Through the Net-Map Method, it was possible to obtain quantitative and qualitative data. Within the qualitative part of the data analysis, the relevant actors were identified. Matrices were created in which the formal and informal relationships were coded. With the help of the software UCINET, relevant network parameters were calculated, providing an indication about an actor's role in the network. Based on the entered data, network graphs could be drawn which sum up the interviewees' individual views on network structures.

For the qualitative analysis, a coding procedure based on Mayring (2015) was used. First, categories for coding were deductively derived. Possible categories arise from the research interest and were for example bonding social capital, bridging social capital, trust or motivation. The interview transcripts were thus searched on a keyword basis. Relevant text passages were assigned to the corresponding categories. In a final step, the results from the categories were summarised.

Results

Governance tasks are decentralized and partly outsourced from governmental responsibility

The formal network representation (Figure 1) shows the decentralized approach of the agri-environmental program. Basically, the framework conditions are set by EU and national level but the province is the responsible authority that carries out the program in collaboration with the collective through the above described “front-door-back-door”-approach of contracting. However, governance tasks are shared among different actors in a more complex way leading to cross-level feedback loops.

First of all, the province is involved in decisions on the national framework of the program. There is an execution unit for nature related issues from the 12 provinces (Bij12) that supports them with information exchange and advice. In this way, regional concerns are considered in fundamental decisions. In addition, regional interests from the collectives are represented by their umbrella organization BoerenNatuur through participation in the national steering meetings.

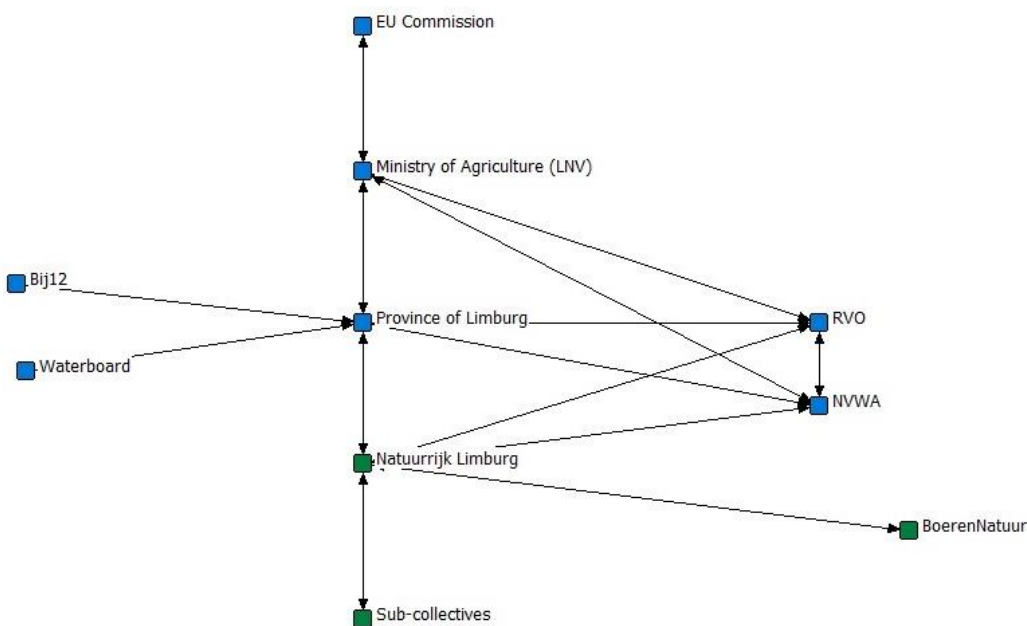


Figure 1: Network representation of formal relations

Regarding the checks of the agreed measures, there is a parallel structure. Central government authorities (RVO and NVWA) undertake checks of the contracted measures at an administrative level and on a random basis also at the field level (on-the-spot checks). The collective itself undertakes checks at field level which often help to identify difficulties in fulfilling the contract early on when adjustments are still possible. In consequence, the province decides on sanctions in the form of reduced payment to the collective in case the controlling agencies detected errors. The collective however decides how they deal with non-compliance of individual farmers according to their statutes (e.g. a “red card” with the requirement to repeat the measure, reduced payment etc.). While the financial buffering function of the collective is highly appreciated, especially by farmers, the dual controlling procedure is often criticized by various stakeholders as creating (unnecessary) costs while signalling distrust in the self-controlling element. Sometimes the assessment by the collective even deviates from the judgement by the agencies, because they have better knowledge on the local situation.

The collective is the most interesting actor in terms of organisational identity. To some extent, it is a self-governing organization of farmers. However, it can also be characterized as a boundary organization that coordinates action and mediates to enable collaboration between actors on both sides (landowners and authorities) (see Westerink et al. 2020). The scope of self-governance of the collective, as part of a large agri-environmental program that is still under the umbrella of the EU Common Agricultural Policy, is limited by its financial dependence on governmental subsidies and accordingly predefined objectives. Although it is not predetermined which measure should be exactly implemented where and how, there is a catalogue of possible measures that the collective can choose from. Hence, the factor making the program successful may be rather the integrating and facilitating role of the collective, mentioned by many interviewees. On the downside, the self-governing identity is undermined by the fact that the members' council has the highest decision-making power within the collective. In fact, most interviewees did not distinguish between the members and the administration unit or the board – they see the collective as one entity.

The importance of social capital for the functionality of the governance network

Informal relations between the actors make the network much denser (see Figure 2). These relations are important for knowledge and information exchange in parallel to the formal communication channels. They also connect actors who are not connected formally, e.g., the collective and nature conservation organizations, or the regional water board, who have ecological expertise and data that are necessary to plan targeted measures. Another example is the integration of the farmers' association in Limburg who contribute agronomic expertise and have certain influence on the members. Informal relations can be seen as a complement to the formal ones. Thereby, regular interaction can build up social capital which strengthens the commitment to cooperate (see de Vries et al. 2019).

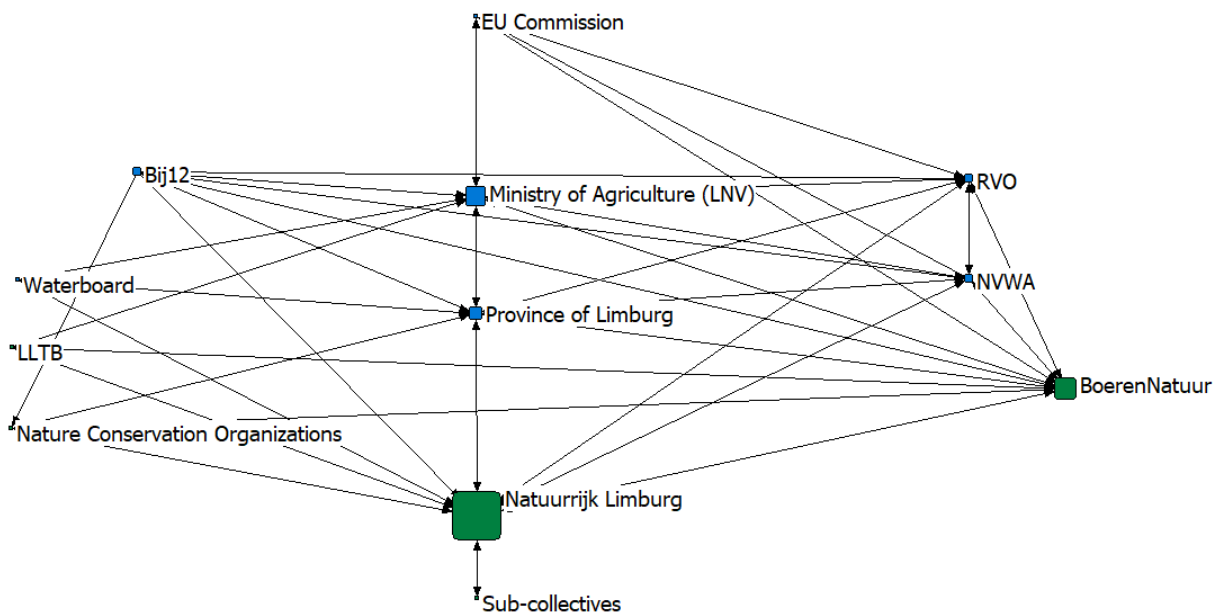


Figure 2: Network representation showing both formal and informal links. Size of nodes indicates how well an actor is connected

Bonding social capital facilitates cooperation between homogenous actors, whose interests and motives are similar. The social cohesion within the collective, among members and between members and the organization is important to motivate members to engage in the program. Therefore, the collective organizes meetings and exchange of small groups on the field. Since Natuurrijk Limburg is a large collective, there cannot be personal relationships between all

1300 members. The nested structure of four local sub-collectives who can bring members in their territory together helps to maintain connectedness to the collective at the regional level.

However, it also bears the challenge that the regional collective can be perceived as a delegating authority in case of disagreement between the regional and the local level leading to a lack of identification and engagement of members. Hence, it is important that the staff at the regional level also tries to be in direct contact with members. In that sense, the fieldworkers play an essential role. They are hired by the regional collective and maintain the direct communication with members through providing advice on site. They undertake the on-site checking of the agreed measures for the collective. They do this in dialogue with the members of the collective, which contributes to a feeling of trust in the organization and the program in general.

Another challenge to maintain bonding social capital may result from planned budget cuts by the province because it is the collective that must communicate to part of their members that they can no longer participate in the program because of a shortage of funds. Nonetheless, the farmers appreciate the facilitating role of the collective and the interviewees stated that they are also motivated by joint efforts and learning, not solely by economic reasons to participate. There is higher demand to participate in the program than budget available.

Bridging and linking social capital facilitates cooperation between heterogeneous actors that differ in organizational backgrounds, interests, or formal power hierarchies. Therefore, a joint evaluation of collective and province on a regular basis on how the program works is important so that solutions to potential bottlenecks can be discussed. Besides the budget cuts several interviewees stated a lack of support from the province, meaning rather the decision-makers than the people from the administration, in terms of developing a shared vision and promoting the collectives' work in the region. However, on the basis of the formal contracting, the collective and the province work together efficiently. The fact that individual farmers no longer need to negotiate with the government in case of dissatisfaction on how measures were carried out is highly appreciated by all actors.

Communication channels from the collective, who bundles knowledge on how things work on the ground, to the national steering level is facilitated through the umbrella organization BoerenNatuur. They are the voice for the collectives. In turn, BoerenNatuur disseminates information from government but also from nature conservation organizations to the collectives. The role of BoerenNatuur as a linking actor is not to underestimate. Yet, interviewees on local level did not name them as important because they may have no direct contact with them.

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Contact: Rena.Barghusen@zalf.de

For further reading see the [Master Thesis of Berner.R.](#)

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