

Sustainable landscape management – the view from the grassroots

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Abstract: Top-down incentive schemes for enhancing biodiversity and landscapes have been criticised as inadequate. An emerging alternative approach to funding individual farmers' management activities is to fund collaborative efforts of farmers and other stakeholders in rural areas. Agri-environmental collaboratives have the potential to provide landscape scale management (as opposed to field or farm scale management) and a matching of public funding with in-kind and volunteer resources that group members provide. A major challenge, however, is the assessment of whether management activities are successful, i.e. the money was well-spent. Accountability is crucial for public bodies providing funding, whereas local groups often place less emphasis on recording quantitative and qualitative achievements. This paper explores the achievements of agri-environmental collaboratives in Germany and the Netherlands from the point of view of their members. A total of 45 key informants and groups members were interviewed. Groups frame their contribution to sustainable landscape management in six fields: their contribution as policy implementer and service provider; as the carer for 'everyday' landscapes; as coordinator and mediator; their contribution to the maintenance and protection of landscapes (including species and habitats); raising awareness and changing behaviours; and generating income and economic benefits. Very little quantitative data are available on the actual impact of management activities in the landscape, and the data are held in various places and different formats. Efforts are needed to acknowledge the contributions of agri-environmental collaboratives and ensure their ongoing commitment while at the same time enhancing monitoring and data management for both tangible and less tangible outcomes in order to meet accountability requirements

Keywords: collaborative management, bottom-up sustainability assessment, landscape, effectiveness

Introduction

A large share of the European landscape is under agricultural use. Therefore, much of the landscape is 'produced' – or at least shaped to a large extent – by farmers. In order to achieve both, sustainable landscape management and sustainable agriculture, farmers are central actors. In recognition of this role, most EU countries have introduced conservation schemes for species, habitats and landscapes, typically addressing the individual farmer.

Schemes have had limited success, which can be partially explained by the lack of landscape-scale management. One approach to encourage landscape-scale management is to support the collaboration of farmers in groups, allowing them to identify the needs and problems in their particular landscape, and subsequently support the actions they plan to take towards this, possibly making use of conservation or schemes. This approach is consistent with recommendation of the

EU Landscape Convention: “Care for the landscape requires collaboration between a wide range of individuals and organisations” (Art 5)⁹¹.

The limited success of schemes that target individual farmers in combination with the embeddedness of farmers within the broader rural context and society makes group approaches an alternative worth exploring. The literature on social capital and collective management of natural resources points to benefits of managing landscapes collaboratively (Sobels et al., 2001 ; Olsson et al., 2004 ; Armitage et al., 2007 ; Compton et al., 2009). However, this literature does not help in understanding what and how groups contribute to sustainable landscape management. This information is essential for policy makers to design or revise current policies. How do we know if it is worth supporting collaborative landscape management? This study aims to provide in-depth insights into the contributions of groups of farmers and other rural stakeholders to sustainable landscape management. The focus is on local groups that are involved in managing cultural landscapes such as agri-environmental collaboratives (AEC). These exist in many countries under different names but they have in common that they identify sustainable landscape management as their goal and carry out activities that support this goal.

Methodological approach: bottom up and from the inside

Sustainability is commonly conceptualised as having three dimensions; an environmental, economic and social dimension (e.g. European Landscape Convention; Committee on sustainability assessment-COSA⁹²), that are very tightly interconnected. What counts as ‘sustainable’ is not well-defined, in theory or in practice. Whether a given management is considered ‘sustainable’ depends on how sustainability is assessed, the perspective the evaluator takes and what his/her interests are. The assessment of sustainability requires indicators. More general and hence universally applicable indicators may exist, but there is a need to complement these with site-specific indicators because of different environmental, economic and cultural circumstances, and different local priorities.

There is a lack of data on AEC and their activities, and where they exist, records of such data are dispersed and not comparable across states or provinces. General benefits of these groups were described for Dutch AEC (Franks & McGloin, 2007) but their discussion of benefits is limited to agri-environmental schemes and neglect the wider benefits of AEC. National studies focus on groups’ activities (Oerlemans et al., 2006) but do not investigate the impact of those activities on landscapes. This is also the case for accounts of German groups (Prager, 2011 ; Metzner et al., 2013). There has been no attempt to capture groups’ contributions in terms of the sustainability of their management activities. In addition, there are issues relating to scale and aggregation. What is sustainable for a farmer in a group may not be sustainable for the whole group or for the whole region. The boundaries of landscapes are fuzzy and rarely overlap with administrative boundaries, which many groups align to.

We follow the methodological paradigm for assessing sustainability indicators that is community-based and bottom-up, rather than the expert-led and top-down paradigm (Bell & Morse, 2001). Within this paradigm it is widely agreed that local communities need to participate in the selection, collection and monitoring of indicators. We assumed that members of AECs are better informed about the group’s activities and their impact than external experts, agencies or observers because not all group activities are documented, promoted or even easily visible in the landscape and the community. Therefore, this paper takes the view of the grassroots people ‘inside’ groups

⁹¹ <http://conventions.coe.int/Treaty/en/Reports/Html/176.htm> in the Explanatory Report. The Convention defines landscape management as “action, from a perspective of sustainable development, to ensure the regular upkeep of a landscape, so as to guide and harmonise changes which are brought about by social, economic and environmental processes” (Art 1e).

⁹² <http://sustainablecommodities.org/cosa>. COSA seeks to provide an indicator set that looks at the three pillars of sustainability

on assessing group contributions to sustainable landscape management. Members may be biased in their view and overrate their contribution. In the absence of sufficient ‘objective’ external evidence we take their perspectives as the starting point and complement it with views from key informants who have an overview of several groups and areas.

Case studies and data base

The study employed an empirical approach that would allow to gather data from a cross-section of groups in two European countries. Data were collected from key informants and members of agri-environmental groups in Germany and the Netherlands. They included Landschaftspflegeverbände (LPV) in Germany and Agrarische Natuurverenigingen (ANV) and Landschapsbeheer organisations in the Netherlands. The sample included 22 members of local groups and 23 key informants (representatives of umbrella organisations, AEC coordinators in a region, scientific experts) (Table 1). Interviews took place between August 2010 and October 2011 with interviewees representing a broad range of different backgrounds, interests, and places of residence in both countries.

Table 1: Overview of interviews

		The Netherlands	Germany	Total
Group member interviews		15 interviewees from 11 groups	7 interviewees from 7 groups	22 interviewees from 18 groups
Key informant interviews	Umbrella organisations	6 interviewees from 5 organisations	13 interviewees from 12 organisations	19 interviewees from 17 organisations
	Research	4 interviewees from 2 organisations	0	4 interviewees from 2 organisations

Note: Some interviewees held different roles at the same time.

The semi-structured interviews (Table 2) contained questions about the group, its goals and specific objectives. The interviews then focussed on contributions and achievements, and ways to measure these. Interviewees were asked what they perceived as the important contributions the group makes to sustainable landscape management. The three dimensions of sustainability (economic, environmental and social) were probed if the interviewees focussed their answer only on one. Group members were also asked what gaps they thought would be left if their group was to disappear. Key informants were asked similar questions relating to their overall impression of groups they were in contact with.

Interviews were audio-recorded and transcribed. The resulting material was analysed in NVivo software for qualitative analysis by coding text to emerging themes. In the presentation of results the quotes are labelled according to the origin of the interviewee: ‘NL’ indicates a Dutch interviewee, ‘DE’ indicates a German interviewee. This allows the reader to recognise similarities and differences in issues and views between countries.

Results and discussion

None of the groups had attempted to evaluate their contributions to sustainable landscape management, nor had they chosen particular sustainability indicators. Results from the key informant interviews confirmed that there is no structured approach to gathering data on the impact of group activities on the overall sustainability of a landscape. The groups had not set defined targets but

followed the broad goal of sustainable landscape management (laid down in their constitution), and their activities were understood to be moving them into this particular direction. Not many groups had invested in establishing a baseline and most were lacking in resources to carry out the monitoring for assessing the progress or level of change for many or all of the group's activities.

The contribution of groups to sustainable landscape management can be framed in six fields that are summarised in Table 3 and presented in turn. Discussing their contributions in terms of achievements and gaps allowed the groups to frame their contributions and bring up those elements that they found important without having to fit it into the frame of the three dimensions of sustainability. The contributions that AEC make to landscape management are based on their activities. Each group has its individual portfolio of activities reflecting the natural context, cultural specificities, the interests of its members, and which activities they manage to get funding for – or organise without funding (de Lijster & Prager, 2012 ; Heide & Prager, 2012 ; Prager, 2013). Therefore, contributions tend to focus on only one or two dimensions of sustainability.

Table 2: Overview of the six fields of contribution of agri-environmental collaboratives.

Field of contribution	Details
Implementer and service provider	<ul style="list-style-type: none"> • German groups frame their contributions in terms of implementing existing plans and programmes, including monitoring for Natura 2000 • Dutch groups frame their contributions as service provider for government • Higher quality and greater efficiency of service and delivery • Higher uptake of agri-environmental schemes • Advisory role for scheme design • Bridging, translating, delivering national policy objectives and local objectives
Carer for the 'everyday' landscapes	<ul style="list-style-type: none"> • Working in both protected and 'everyday' landscapes • Maintaining marginal land where there is little economic interest in managing • Managing public goods and undertaking valued activities that no-one else provides because the market is too small • Partner to municipalities, government agencies in managing public land
Coordinator, mediator and 'local face'	<ul style="list-style-type: none"> • Conflict resolution, mediator • Project instigator, networking, continuity • Advisor and contact point for farmers, building trust and acceptance
Maintaining, preserving, protecting	<ul style="list-style-type: none"> • Landscape management activities • More projects, more benefit to nature and landscape • Aware of lacking causal relationships, slow change and uncertainty in impacts
Raising awareness, changing mindsets & behaviours	<ul style="list-style-type: none"> • Raising awareness amongst farmers and changing mindsets • Raising awareness amongst members of the public of landscape and nature • Schools and events, guided tours • Improving farmer image • Altering attitudes
Income and economic benefits	<ul style="list-style-type: none"> • Income from landscape management • Jobs, money into local economy • Training and skilled volunteers • Efficiency • Tourist attractions and infrastructure

Implementer and service provider

German groups frame their contributions in terms of implementing existing policies, plans and programmes. LPV have worked closely with the relevant state ministry in the design of schemes, providing advice on the measures and technical details that enhance implementation on the ground (DE7). Dutch groups are also actively involved in shaping policies, and emphasise their role as a service provider for government.

Regarding the implementation of policies, groups in both countries argue that there is a higher uptake of agri-environmental schemes (confirmed by the Dutch Ministry of Agriculture according to Franks and McGloin 2007) due to their advisory activities, their contacts and the reputation they have with farmers, and the help they provide with completing applications (DE7). A higher number of participants is expected to lead to higher scheme effectiveness. A Dutch interviewee describes the role of the ANV as follows: *“The farmers and the government get a lot of service from us. Because the government just comes with the money (...) They don’t have to divide the money, they don’t have to discuss it, to plan meetings, address the farmers, send letters, nothing. If the government had to do that, they’d need more staff”* (NL18).

Without AEC, species and habitat protection programmes and landscape management programmes would suffer from lower uptake (DE10), which causes problems for the ministries because their scheme budgets cannot be fully spent (DE2, DE4 DE8). The innovative, conservation-oriented farmers would still sign up for agri-environment schemes and enter contracts with government, *“but they would not take their neighbours with them, because (...) there is no group meetings. They would be individuals again, having a contract with government, instead of a group of farmers together through an ANV like this, going to government”* (NL18). This statement also points to the role of AEC as the conduit between government and farmer, providing a contact for agencies that want to reach farmers or spread information, or vice versa, for the farmers to approach government with one voice. These findings confirm earlier studies, e.g. that AEC *“build bridges and deliver local and national policy objectives whilst simultaneously support[ing] their members’ interests”* (Franks & McGloin, p484) and *“inter-mediating points par excellence”* for policy makers and the target audience (Roep et al. 2003).

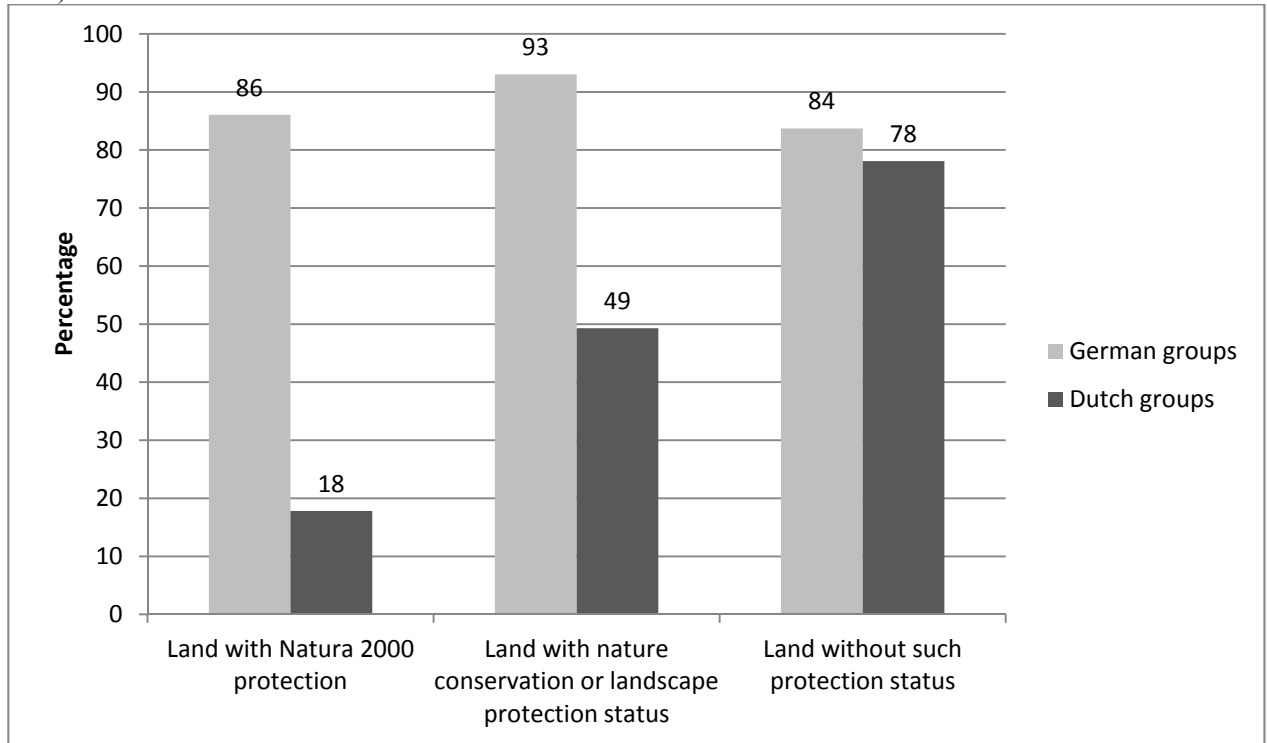
In some German states, groups are recognised by governmental stakeholders and policy makers as valuable partners in the implementation of Natura 2000 (DE11). Their role ranges from the identification of areas, drawing up management plans, implementing the management activities and monitoring. Where LPV contribute to monitoring and recording for Natura 2000 (DE10, DE13, DE8), agencies would struggle to meet all reporting of habitat and species condition without LPV’s service (DE6). Some interviewees claimed that there would be less monitoring overall (DE4, DE13) e.g. regarding traditional orchards, trees, springs, hedges, and bird and insect species.

Interviewees emphasised the higher quality, the broader base and higher efficiency of landscape management activities achieved with the involvement of AEC. German interviewees argued that the higher quality and more sustainable implementation is a results of LPVs being ‘closer’ to local actors, providing on-farm advice and generating local ‘buy-in’ for measures (DE6, DE5, DE11, DE3, DE17; see section 4.3). For example, higher quality is achieved by establishing an *Ökokonto* where funds and land can be banked to achieve effective compensation to offset environmental impacts from building and development (DE12). Improved compensation measures are evident in a higher survival rate of the planted shrubs and trees (DE7), due to the selection of appropriate species in the first place, the right planting time, and the regular check that plants root down well. Both German and Dutch interviewees anticipated higher costs for the implementation of programmes and specific projects without the involvement of AEC: Landscape management *“is not changing but it’s going to cost us more money and the acceptance [of farmers] is worse”* (NL20; see also section 4.6).

Carer for the ‘everyday’ landscapes

A similarly high share of AEC in both countries was found to work on land that has neither Natura 2000 nor another nature or landscape protection status (Figure 1), reflecting the groups’ approach to managing ‘everyday landscapes’ as well as protected sites. The focus on these everyday landscapes is more pronounced among Dutch groups. In contrast, German groups have fully embraced their role as managers of Natura 2000 sites, which is more than four times higher than among Dutch groups.

Figure 1: Protection status of the land that groups work on (n=116, 43 German, 73 Dutch groups). Source: (Prager, 2013)



In the absence of AEC, municipalities and the state would face serious issues with regard to maintaining the condition of land they own (DE12, DE8). Nature conservation trusts (important stakeholders in Sachsen and Schleswig-Holstein) would struggle to identify suitable land to purchase for nature conservation purposes, to negotiate agreements with farmers, and to manage some of the areas.

AEC contribute to maintaining habitats and landscapes on marginal land that are of little economic interest and hence most vulnerable to abandonment (DE10). Keeping traditional land use systems and cultural landscapes ‘in use’ meant that valuable habitat (figures mentioned ranged from 100ha – 2000ha) could be preserved which would otherwise be neglected because the market is too small to make management activities economically viable (DE8, DE12, DE13). Without AEC, mountain meadows would overgrow, small river valleys could not be kept open (DE2, DE7, DE4), grassland would be abandoned (DE8) and traditional orchards would disappear. For a Dutch interviewee, (active) farmers are “*the most important manager of our rural areas in the Netherlands. So to keep that landscape it is really important that farmers are there*” (NL4).

Coordinator, mediator and ‘local face’

A third field of contributions is the role of AEC in enhancing communication and coordinating action between different stakeholders that are important for landscape management (DE15, DE8,

DE9). There is an immense breadth of projects that AEC are implementing, typically with a set of diverse partners ranging from municipalities, authorities (water, soil, nature conservation, energy, regional development) to private companies such as railway, airports, road builders to small enterprises such as restaurants, supermarket chains, and animal feed dealers. Interestingly, improving communication and networking, putting different stakeholders in touch and negotiating and advising roles were rarely framed as separate achievements. This may be due to the common perception of groups that these activities are essential to achieving their goals and undertaking their activities. It lies at the heart of the understanding they have of what they are and do, and is difficult to capture in numbers.

The conflicts between farming and conservation interests were one of the reasons for establishing AEC initially. *“Even the relationship between state and voluntary nature conservation was characterised by mistrust”* - which has significantly improved now (DE12). Resolving conflicts was mentioned as an achievement by many interviewees (DE17, DE6 DE4, DE14). Without AEC, the situation might return to *“more fighting and less talking”* (NL19), and a renewed surfacing of conflicts (DE7). *“Getting people to talk to each other”* and organising ‘a round table’ is one of the core strength of LPV (DE17). Communication is crucial for conflict resolution. Many conflicts are based on misunderstanding and lack of information, hence facilitating the communication between different land users and stakeholders – such as farmers and conservationists – is an essential contribution.

AEC are described as the “bridge between farmers and society” (NL13, NL24). Without them, there would be less communication, less exchange, and a lack of continuity in management and cooperation efforts (DE10, DE4). Starting *“communication between farmers and the volunteers”*, i.e. locals from villages and towns in the area (NL21), is one example where interaction can help to enhance understanding, reduce potential conflicts and increase regional identity by learning about their locality (DE3).

Several interviewees stressed the importance of the “local face”, the role of the AEC as the conduit between government agencies or municipalities and local land managers (NL5/6, DE8). Roep et al. (2003) found for two Dutch environmental cooperatives that they succeeded in involving 90% and 70%, respectively, of the local farmers in landscape management activities. The accessibility and flexibility of a local contact person who is trusted by both parties is seen as crucial for the success of government programmes. Without the ANV, *“a lot of farmers would just stop [participating in schemes]. Because they would have an arrangement with government one-on-one again and that feels tricky for some farmers. [The government] is too far away, whereas we are a lot closer. People know who they talk to when they call [the group’s coordinator], he’s practical”* (NL18). Another interviewee sums up the AEC’s role as follows: *“Our biggest role is still to make the contact between people who live here, the farmers and the government and try to get them together to think about their landscape”* (NL19).

German groups frame their contribution more in terms of linking local and regional stakeholders and networks (DE5, DE4, DE14), achieving cooperation across sectors and administrative boundaries (DE10) and establishing viable networks (DE13). The idea of the “local face” was referred to as a central contact person that farmers, other land managers, municipalities and even conservation authorities could go to (DE8, DE13), e.g. for swift unbureaucratic advice (DE2). AEC often function as the nucleus for initiating and developing projects across different land uses and interests, from the vague idea that small communities or individual stakeholders might have to something that is feasible and attracts funding (DE13, DE8, DE9). One interviewee coined LPV as ‘Cooperation managers’, for example for starting a LEADER initiative in their region (DE8) or for small-scale farmers that can only jointly make investments (DE2).

Improved communication and collaboration helps to build trust (NL12), thus paving the way for future successful collaboration. As a central achievement, interviewees highlighted the large degree of acceptance and trust that LPV have earned over the years from farmers (DE2), as well as from authorities (DE12, DE13, DE4, DE11). Groups are proud of their large networks, e.g. 25 member organisations (DE8) and undertaking projects with 150 municipalities (DE9).

Maintaining, preserving, protecting

A core area of AEC contributions is related to maintaining, preserving and protecting the landscape, including species and their habitats. What the groups identify as their main achievements often mirrors their activities. In the West of Holland, many groups say that their biggest achievement is their “work with the meadow birds” (NL19, NL21, NL25, NL23/24). Some of them specify this with numbers from monitoring reports and highlight particular bird species whose numbers have increased, or at least remained the same, when in the Netherlands overall this species is in decline. Without AEC, gaps would be visible in the landscape and in species protection. “*For the meadow birds it would be dramatic*” (NL19). Rare species (e.g. field hamster, DE13) would not be looked after any longer.

Management activities of German groups relate to the organisation of ongoing grazing on marginal grassland in order to avoid overgrowing/succession (DE2, DE15, DE12), hedge planting to reduce wind erosion (DE14), maintenance of species-rich grassland, terraced vineyards, wetlands, and dry stone walls (DE5, DE13), removal of drainage to revitalise moors (DE6), and maintenance of landscape elements (DE3). Across both countries, ‘more projects’ implemented were perceived to translate to ‘more benefit’ for landscape, people and biodiversity.

Very rarely could interviewees quantify what they had achieved. In some cases they could refer to figures included in their annual report or activity reviews over a number of years (de Lijster & Prager, 2012 ; Heide & Prager, 2012). Only two groups could immediately respond with numbers to the question of what their local group had achieved: planting more than 10.000 trees in 5 years (NL14-16) and increasing numbers of volunteers and landscape elements (in units, length or area) established or maintained (NL3). Some Dutch groups are excellent in collating monitoring data from volunteers, through the local groups, and passing it on to their umbrella group.

The ecological impact of one group disappearing would not become immediately visible in the landscapes due to the relatively slow nature of change and the lack of capacity for (comprehensive) monitoring. Many interviewees recognise that the changes in the landscape would be incremental and subtle. Interviewee responses ranged from the view that perhaps not many people would notice if one or several groups were missing, to the view that quite a number of gaps would appear (in particular the quality and frequency of management activities was a concern because authorities are lacking the necessary personnel capacity and skills [DE13, DE4, DE11]). The cautious remarks illustrate the difficulty in entangling what groups contribute to landscape and farm bird management from the share of other actors’ activities: “*When we look at the landscape it is really hard to say what would happen*” (NL19) and “*you [...] think nobody can live without you but when you are gone all new things will happen*” (NL23/24).

Raising awareness, changing mindsets & behaviours

Previous studies noted that “it is perhaps by altering attitudes that environmental cooperatives have made their greatest contribution” (Groeneveld et al. 2004, p. 34, cited in Franks and McGloin (2007)). Comments relating to awareness-raising and changing mindsets were made by all interviewees. Some interviewees discussed how successful they were in influencing a change of mindset in very production-oriented farmers in their area and managed to raise “*awareness among the farmers*” (NL17/18) for the importance of biodiversity on farms. “*We stimulate many landowners to do something good for nature or the landscape*” (NL3). Interviewees reported that AEC provide opportunities for meetings between farmers that are important for new ideas to spread, and for getting “*farmers excited about farmbirds*” (NL21), other wildlife and plants on their farm (NL17/18).

A Dutch interviewee claimed their group helped to increase the share of nature-friendly farming (NL13) while Germans groups framed this contribution as convincing farmers to adopt extensive land use (DE16, DE7). For example, farmers now make allowances for birds in their meadow management (DE13). AEC “*help farmers to think*” and come up with better ways of farming themselves (NL20). These changes in behaviour are not taken to be fixed now. Without continued discussion and involvement in AEC, “*the farmers would focus back towards production*” (NL18).

Awareness raising and environmental education activities, both among farmers and the general public (DE5, DE13, DE9, DE11) are an important part of the activities of groups. Groups contribute to altering the attitudes among the general public and involving the local population in landscape maintenance (DE12). One group organises 10-20 working days annually, each with 30-110 people (DE15). In addition to the obvious benefit to the landscape, such involvement also enhances the identification with the locality and region, learning and interaction of diverse community members. In several cases this has sparked new initiatives and groups which have organised further events and activities (DE15, DE2, DE4, DE7). Some are involved in care farming and integration of immigrants (NL23/24). Fruit from orchards is given to charities for free (DE16). LPV are often the organiser for knowledge exchange events e.g. among shepherds (DE8) or well attended information events for land managers on riverside margin management (80-100 participants, DE16). A combination of changed mindsets, more environmentally-friendly farming and awareness-raising activities helped to improve the image of farmers in the region (DE9, NL17/18).

Other groups are proud to have compiled a map of their local area which highlights visitor attractions including natural and gastronomic features (e.g. paths, farm shops, historic information) and they are able to regularly update it (NL22, NL23/24). Producing brochures (DE10, DE12) and signage (DE10, DE17, DE13) are means to enhance knowledge about the region’s cultural and natural heritage, attract visitors and income streams.

The fact that AEC are typically active in public relations and awareness raising was seen as one of the reasons why their role could not easily be taken up by another organisation even if that organisation was capable of covering the technical functions of LPV: “*the societal and political basis and acceptance would always be missing*” (DE9).

Income and economic benefits

A few groups and coordinators highlighted the creation of jobs as an important achievement (DE5, DE3). In some cases, this was important off-seasonal work, e.g. keeping up to 100 seasonal workers employed during the winter months for pruning and other landscape maintenance work (DE17). Through establishing a ‘landscape maintenance team’ many unemployed locals can be given at least part-time work (DE16). Such efforts are especially beneficial if coupled with training and qualifications (e.g. fruit tree carer, DE12; tree pruning, DE17). A Dutch group re-

ported on how they organise a workforce for landscape maintenance work and emphasise that farmers are able to earn money from ‘producing landscape’ (NL14-16). The particular role of the group relates to advising farmers on contracts.

An indirect economic benefit is accrued when volunteers carry out work for free that otherwise would need to be paid for. Especially Landschaftsbeheer groups are proud of how they coordinate and encourage volunteers by arranging tools, insurance cover, and training. An interviewee stated *“a large part of what they [the volunteers] do would not be possible anymore because they use our tools (...) We give them knowledge by giving courses”* thus ensuring landscape maintenance work is carried out with high quality” (NL3).

There is a general agreement that LPV are able to and often do bring substantial amounts of money into the region, e.g. by acquiring project funds (DE9) or keeping the landscape attractive for tourists (DE5). LPV are registered charities and can apply for projects which a district or municipality cannot. In particular German coordinators are occasionally asked to express the value of LPV activities in monetary terms. *“Some policy makers want to know ‘what do I pay, what do I get’. So I tell them ‘You pay 1 Euro and get a return of 5 Euros”* (DE7). Another figure used is that about 65% of the money generated via projects is passed onto local stakeholders (farmers, businesses) (DE4), or in other terms, about 30% remain with the LPV to administer and coordinate the project (DE11). Groups in both countries were of the opinion that they can work more effectively and for less money (than e.g. an authority) (DE5, DE4): If the government was doing landscape management without groups *“It’s getting too expensive and the government can never do it good, very inefficient”* (NL2).

One interviewee illustrated the link between social, environmental and economic dimensions of sustainability by summarising the contribution of LPV as follows: *“By maintaining the landscape LPV ensure that people can stay in rural areas and enjoy a high quality of life. That’s the social dimension. With a scenic landscape you attract the tourists, that creates jobs and the people can stay”* (DE5). Hence, the landscape management activities maintain the basis for tourism (scenery, attractive species, cycling and walking tracks) that generates economic benefits for the region.

AEC are also essential in developing perspectives for farmers to invest in landscape management as a source of income. A number of German interviewees claim that without LPV, small farmers and shepherds are likely to give up farming due to lack of future perspectives (DE1, DE8). Without the effort that LPV invest into organising training and qualification for land managers to enable them to properly maintain a habitat (e.g. how to cut an orchid meadow, manage a fruit orchard) or landscape elements (pruning hedges and trees, manage small ponds), there would be no capacity to actually carry out the work (DE11). The challenge is to keep vibrant farming enterprises, skilled workers and grazing animals in the region in order to maintain its cultural, natural and aesthetic value.

Conclusions

This paper set out to contribute to the understanding of what collaborative groups contribute to sustainable landscape management, adopting the ‘grassroots’ perspective of agri-environmental collaborative (AEC) members. The study collected empirical evidence to answer the question: What are the benefits of supporting collaborative landscape management as opposed to providing grants to individuals? The answer to this question is of particular interest in designing agri-environment and landscape policies as well as for sustainability assessment more broadly.

The results of the study provide evidence that supporting groups provides a range of benefits:

- Maintaining a high uptake of agri-environment schemes and habitat/species protection programmes;
- Providing a contact for accessing farmers and a broader set of stakeholders in a locality;
- Ensuring high quality implementation of measures;
- Supporting social sustainability, environmental education and public awareness;
- Having non-designated ‘everyday’ landscapes looked after;
- Getting more ‘bang for your buck’ (i.e. efficient implementation and additional volunteer contributions);
- Joined up implementation of landscape-related projects supported by a broad range of relevant stakeholders and increased regional identity; and
- Continuity of management beyond projects.

Very few of the contributions made by groups (Table 3) could have been achieved by disconnected actions of individuals. A central observation is that many of the group contributions are difficult to quantify. There are intangible benefits which can only be described qualitatively (e.g. in narratives), and the link between the action of one group and certain benefits (cause and effect) cannot easily be teased out. Determining AEC’s contribution to an improved environment is constrained by the difficulty of establishing what would have happened in their absence (Franks & McGloin, 2007). The same applies to improved social or economic sustainability: it is hardly possible to establish the counterfactual. In addition, there are time lags between a management activity (or lack thereof) and its effect.

The critical question is whether the framing of grassroots views are accepted as valid indicators of sustainable landscape management, both by government agencies and researchers. The benefits of supporting collaborative management come with a few ‘challenges’, in that they require agencies and policy makers to a) accommodate the lack of quantifiable evidence; b) factor in funding for the coordination effort involved; and c) factor in extra funding if ongoing monitoring is required.

There is a need to meaningfully combine top-down, external sustainability assessments (still the dominant approach used by funders) with bottom-up, internal assessments. However, as this study showed, the latter yields different insights, because different questions are asked by local people and different aspects of sustainable landscape management are assessed. Assessments using quantitative scales are a rare output. Of the six fields of contributions, only a limited selection lends itself to being captured in quantitative terms (e.g. size of networks; number of group members; number of projects and management activities; species and habitat monitoring; events, tours, courses and publications; amount of funding and income generated). It should be noted that most of these are measuring output (activities implemented) and as such are proxy indicators that do not directly measure impact on the sustainability of a landscape.

Monitoring and assessment are important to capture changes and impact over time, regarding management activities’ impact on landscapes as well as group health and commitment. Monitoring and data management for both tangible and less tangible outcomes needs to be enhanced in order to meet accountability requirements and to be better able to assess the impact of policies. Data collection and recording should be made easier for groups and individuals (e.g. through technology such as mobile phone applications), and data bases should be shared and managed intelligently across organisations and levels.

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