

A BLUEPRINT FOR GREEN CO-OPERATIVES: ORGANISATIONS FOR CO-ORDINATING ENVIRONMENTAL MANAGEMENT ACROSS FARM HOLDINGS

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Biographical

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Abstract

Dutch environmental co-operatives (ECs) are voluntary clubs of farmers (and often non-farmers) working to enhance the natural environment and the rural economy. They can be described as boundary organisations as they bring together diverse interest groups to share perspectives, rekindle motivations, and develop and support innovative programmes. Their particular contribution is to co-ordinate environmental activities that span farm holdings thus addressing environmental problems at the most appropriate scale (e.g. landscape or catchment rather than the farm by farm approach typically used). This paper describes a sample of long-established and more recently established Dutch ECs, their emergence and growth, and the managerial, operational and financial arrangements they have to support their work. The principal aim of the paper is to show that these organisations can be established by small groups of dedicated farmers, with a shared interest. It is argued that this model provides an additional option for land managers and environmental agencies elsewhere facing similar environmental pressures.

(Key words: co-operation, nature management, collaboration, integration)

INTRODUCTION

Dutch environmental co-operatives (ECs) are clubs of farmers and often non-farmers who work to better integrate farming practices with nature management, and farming businesses with the local economy. There are some 125 ECs in the Netherlands involved in a wide range of activities, including co-ordinating environmental improvements (e.g., making joint applications to agri-environment schemes, organising landscape improvements such as tree planting and dyke maintenance); increasing access (e.g. creating foot-paths and bike-routes across members' land); providing services (e.g. training, advice to land managers on applications for environmental (and rural development) schemes); facilitating social exchange (e.g. organising discussion groups); lobbying, influencing and changing policy (e.g. access to local and national government policy formation); research (e.g. on-farm research); and providing critical mass to initiate, for example, networks to provide services for tourists in their local areas. Most ECs are involved in several of these activities (Renting and van der Ploeg, 2001a) and whilst the range is wide, each EC tends to prioritise those activities that meet local needs and opportunities.

One factor environmentally-orientated activities have in common is the mis-match between the spatial characteristics of the environment and land ownership and its

management.¹ This mis-match is described as the institutional fit problem which Gottfried *et al.* (1996) refer to as “economies of configuration”. The problem is that individual land managers/owners acting alone cannot provide the socially optimal mix of ecologically provided goods and services. ECs help overcome the institutional fit problem by bringing together diverse groups with overlapping interests in the environment and land use to share perspectives, rekindle motivations and develop and support innovative programmes. As such they are examples of the boundary organisations many conservationists believe to be important for developing future wildlife conservation and protection programmes (Berkes, 2003; Cash and Moser, 2000).

There are substantial similarities between the Netherlands and many other developed countries in relation to their agricultural production, environmental issues and policies, and an increasing dependency of farm incomes on diversified activities, which more closely integrates their financial prosperity with the wider rural rather than the narrower agricultural economy. As a member of the European Union, the policies the Netherlands can use to address environmental issues are largely prescribed by pan-European Union Regulations. These factors suggest that ECs may have a role to play in other European countries (OECD, 1998), especially as many already have policies that emphasise the need to bring resources and decision-making together at the local level (DEFRA, 2004a), which plays directly to a particular strength of ECs.

It is perhaps surprising therefore that EC-like organisations are not commonly found outside the Netherlands. This may be explained by the way environmental policy was implemented up to 2000. Unlike other European Union member states, the Netherlands government largely excluded farmers from participating in environmental management schemes, preferring specialist nature-management organisations, such as Staatsbosbeheer,² to manage land designated for conservation and protection. But there is another explanation and that is that land managers elsewhere do not know

¹ Co-operative organisations of farmers have operated beyond the farm-gate as marketing co-operatives for many years now, but this analysis focuses on environmental co-operatives.

² Staatsbosbeheer is The Netherlands National Forestry Service. It has responsibility for environmental conservation of a large area of the Netherlands.

how to establish, organise and manage organisations like ECs. By describing the formation, growth and management of a sample of Dutch ECs, this paper provides a blueprint for setting-up, organising and managing environmentally orientated organisations that can initiate, manage and develop environmental schemes that span individual farm holdings.

The next section briefly introduces the research methodology. This is followed by a review of the motivations that led to the establishment of ECs, a description of how these organisations grew their membership, and the organisational structures they have put in place. Potential barriers to establishing ECs are then discussed, drawing on evidence from farmer non-members in particular. This is followed by a discussion and a short conclusion.

RESEARCH METHODOLOGY

A case-study approach was used to allow responses to be contextualised. Given the good information about the underlying population of ECs, it was possible to identify a sample that included long established and more recently established ECs. Sampling by the length of time an EC has been active allows changes in motivation, organisation and management to be compared between and within ECs over time. Eighteen interviews were undertaken involving thirteen farmer members, three non-farmer members, and two farmer non-members (seven interviewees were current board members; six farmers and one non-farmer). The proportion in each category of interviewees was largely determined by availability and willingness to participate in the research. The seven ECs in the sample were De Lingestreek, Meander, PION (formerly De Peel), Zwartemeerdijk, Kollumer Grien, Den Hâneker and VEL/VANLA. Their locations are shown in Figure 1.

A further six additional interviews were undertaken, two with representatives of The Netherlands Ministry of Agriculture, Nature Management and Fisheries (MinLNV), one with an academic working closely with one EC, two with representatives of Natuurlijk Platteland Nederland (an umbrella organisation that represents ECs at government level and offers ECs advice and support) and one with a representative of

Staatsbosbeheer. The survey data was supplemented by an extensive literature review. More details of the survey methodology are available in Franks and Mc Gloin (2006).

PHASE 1: ESTABLISHING ENVIRONMENTAL CO-OPERATIVES

Foundation members were often those committed to earning a living from farming, and were generally young farmers with families. Many had represented farmers in farmer union activities or through other, (often) voluntary, committee-based work (Table 1). Many had earned the trust of both the farming and rural communities. Their experience and reputation suggested they had an aptitude for committee work and the ability to “get things done”.

Figure 1. Approximate location of surveyed environmental co-operatives.

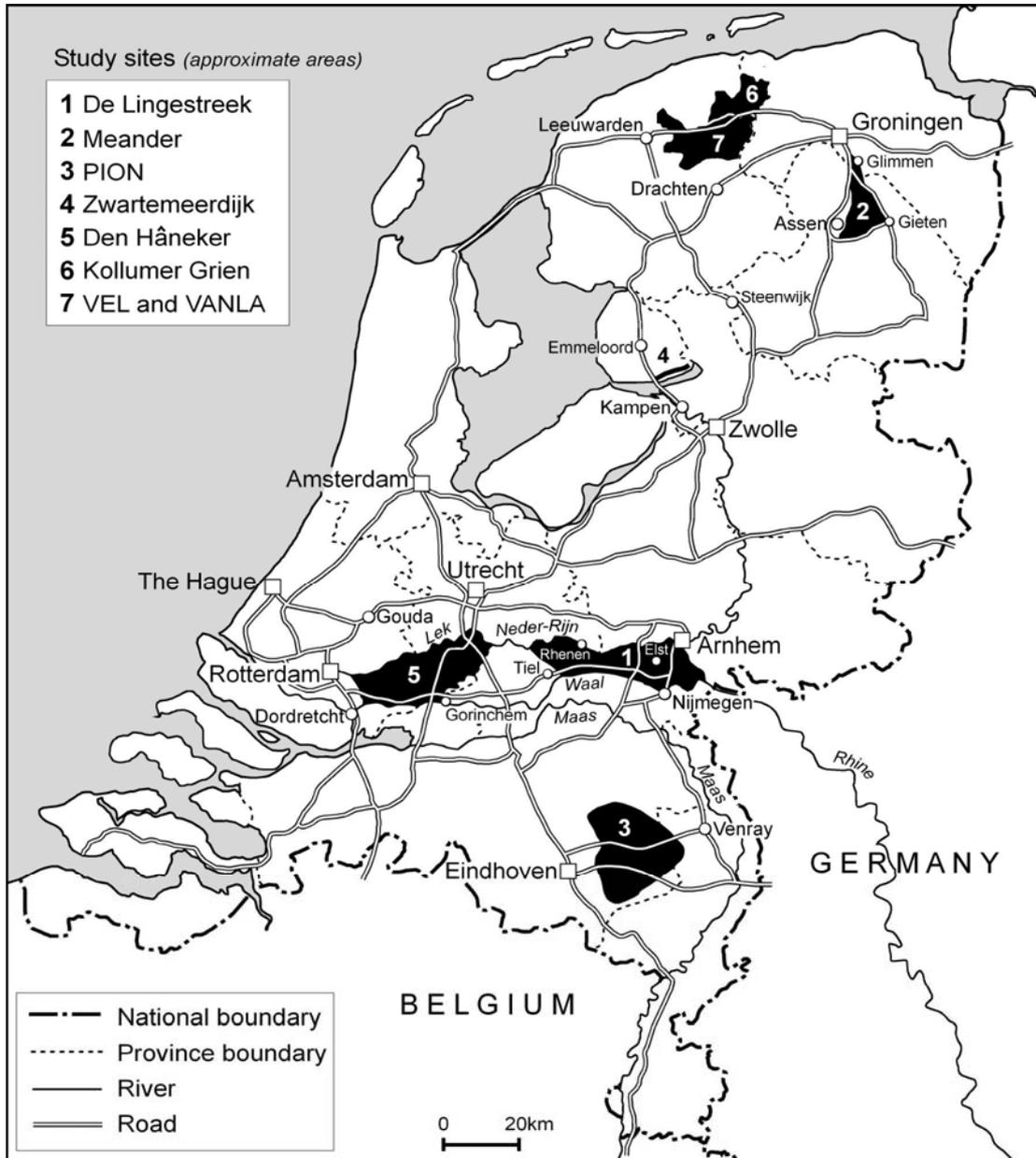


Table 1. Characteristics of the environmental cooperatives' founding members.

De Lingestreek	Meander	PION <i>(formerly De Peel)</i>	Zwartemeerdijk	Kollumer Griem	Den Hâneker	VEL/VANLA
<ul style="list-style-type: none"> ▪ Committee members very committed. ▪ Wish to secure a future for farming. ▪ Involved in voluntary groups and retired people. ▪ Many older farmers. ▪ Active in farmer organisations. 	<ul style="list-style-type: none"> ▪ Younger farmers hoping to secure future in farming. ▪ Some active in local farmers' organisations. 	<ul style="list-style-type: none"> ▪ Originally young farmers interested in a fresh approach to farming vs. environmental conflicts. ▪ Prior involvement with farmers' organisations. 	<ul style="list-style-type: none"> ▪ Initiated by one farmer interested in nature and birds. ▪ Previous involvement in voluntary activity. ▪ Interested in small scale localised projects. 	<ul style="list-style-type: none"> ▪ Larger farms. ▪ Prior involvement with local farmers' organisations (pre-LTO). 	<ul style="list-style-type: none"> ▪ Strong Christian beliefs on stewardship of land. ▪ Farming leaders who believe in the interdependency of farming and nature, that the separation of these functions is flawed. ▪ Active in community activities. ▪ Emerged out of support group for South American farmers. 	<ul style="list-style-type: none"> ▪ Strong Christian beliefs on stewardship of land. ▪ Disadvantaged area, locally adapted traditional management practices persist. ▪ Culturally distinct area of the Netherlands. ▪ Members have generally small farms with intensive land use.

The principal reasons for establishing ECs and for members joining are summarised in Table 2. It records a wide range of issues, perhaps the most important being a perceived need to find better ways to integrate farming and the environment, particularly through viewing farmers as nature managers. This was linked to another common motivation, the need to develop new ways to earn income. Improving farming's public image was also cited as important, with ECs seen as organisations that could address this by promoting dialogue and co-operation between members, and between members, other rural dwellers, and the government/environmental agencies. Typical comments were:

“They [EC members] can see that they can get more profit [by joining an EC], it is better for their farm”, (farmer member (5a) - Den Hâneker).

“I like co-operation between farmers and non-farmers.... Firstly there is greater exchange of information and knowledge between farmers and non-farmers and secondly, citizens become more involved in the work of the farmers and their farming activities, and become engaged with the countryside,” (farmer member (1b) – De Lingestreek).

These motivations are likely to resonate with land managers, governments and environmental agencies in many countries experiencing similar economic and environmental pressures.

There was little evidence that the driving forces for the establishment of ECs have altered much over the years, other than a reduced emphasis on environmental issues. The success with which the earlier ECs had influenced environmental policy allowing farmers to participate in environmental management meant newer ECs did not need to focus on changing environmental attitudes of farmers, conservationists and the government/environmental agencies. However, a consequence of this earlier success has been a gradual drift by ECs from environmental issues forming their core activities; this was particularly noticeable with PION.

Table 2. Member's reasons given for supporting environmental co-operatives.

De Lingestreek	Meander	PION* (formerly De Peel)	Zwartemeerdijk	Kollumer Grien	Den Hâneker	VEL/VANLA
4 years**	1 year**	11 years**	3 years**	9 years**	11 years**	12 years**
<ul style="list-style-type: none"> ▪ To conserve and monitor the regions nature and landscape value; ▪ To raise awareness of nature conservation; ▪ To raise awareness of farming practice among non-farmers and improve relationship between farmers and citizens; ▪ To create opportunities for nature conservation; ▪ To integrate nature conservation into farmer activities; ▪ To promote the involvement of non-farmers in nature conservation. 	<ul style="list-style-type: none"> ▪ Interested in long term agri-environment packages, as change in farming practice can be substantial; ▪ To ensure access to conservation/ rural development funds for farmers; ▪ To create a local representative body for negotiations with Staatsbosbeheer and others. 	<ul style="list-style-type: none"> ▪ To seek solutions to the impasse between farmers and environmental concerns in De Peel area; ▪ To promote dialogue and understanding between farmers and environmental interest groups; ▪ To seek local consultative solutions to the environmental and farming problems in the area; ▪ To demonstrate and prove the capacity of farmers to self-regulate the farming environment ▪ To maintain 'a licence to produce'. 	<ul style="list-style-type: none"> ▪ To develop a better image of farmers with the wider public; ▪ To improve land that no longer had commercial utility; ▪ To promote co-operation between farmers as a social support; ▪ To make the area more attractive with flowers etc. 	<ul style="list-style-type: none"> ▪ To co-ordinate and administer the Land Consolidation Programme; ▪ To resolve conflict between farmers and other interests on the Land Consolidation Programme over prescriptions on environment and landscape improvements. 	<ul style="list-style-type: none"> ▪ To jointly preserve their environment against the threat of top-down planning of governmental bodies – the Provincial Landscape Plan; ▪ To bridge the gap between nature conservationists, farmers, government bodies and local organisations through dialogue and communication. 	<ul style="list-style-type: none"> ▪ To counter encroachment of policies perceived to be detrimental to local farming conditions; ▪ To integrate local farmers knowledge with that of science; ▪ To create a body interested and capable in lobbying for environmental interests and farmers; ▪ To protect the environment of the Northern Frisian Woodlands.

* Describes initial aims of De Peel, subsequently became PION which appears to have changed direction as a rural development project management group.

** Number of years from the EC's foundation to the year of survey (2005).

Some driving forces in forming ECs are clearly Dutch specific issues, e.g. their Land Consolidation Programme, but most issues apply in many countries (e.g. to make an area more attractive and to enhance rural development opportunities). However, many countries may have specific drivers motivating farmers to form organisations to co-ordinate environmental management across farm holdings.

PHASE TWO: GROWING THE MEMBERSHIP

Having established a nucleus of active members, most ECs sought to increase their membership. However, after the initial publicity in the local press and generally a letter/e-mail to local farmers, little effort went into recruiting members. For example there was no evidence among the seven ECs studied of a concerted recruitment drive. Whilst members were kept informed of the activities and developments of their EC by newsletters, informal social gatherings, and regular meetings (Table 3), non-members interviewed were not well informed about their local EC's activities.

The percentage of eligible farmers within each EC's territorial boundaries who were members of their local EC ranged from 15% for Kollumer Grien and De Lingestreek, to 100% for Zwartemeerdijk.³ This is despite the theoretical benefits of enrolling of all eligible members (which includes an increase in critical mass, sending a more powerful message to other organisations, potentially allowing more activities to be undertaken, increasing the pool from which officers could be drawn, and preventing eligible non-members from forming competitor organisations) – benefits that were clearly understood by interviewees. Rather, members of ECs were cautious about recruiting new members because of possible difficulties they could bring in terms of destabilising the group, loss of coherency etc. For example:

³ Interviewees' estimates.

Table 3. Strategies for establishing environmental co-operatives: recruiting members and growing the membership.

	De Lingestreek	Meander	PION <i>(formerly De Peel)</i>	Zwartemeerdijk	Kollumer Griem	Den Hâneker	VEL/VANLA
How were potential members informed of the EC?	<ul style="list-style-type: none"> Letters to all members of the local LTO branch.* 	<ul style="list-style-type: none"> By letter and telephone calls. 	<ul style="list-style-type: none"> Initiated by ZLTO*, facilitated development of separate group; Produced brochure; Amalgamated with ZLTO in 2000. 	<ul style="list-style-type: none"> Initiator visited neighbours, gradually all joined. 	<ul style="list-style-type: none"> Through the local farmer organisations. 	<ul style="list-style-type: none"> By letter. 	n/av
How were members recruited?	<ul style="list-style-type: none"> Activation of projects for potential members participation; Public lectures. 	<ul style="list-style-type: none"> Organise talks and lectures; Prepared project plan. 	<ul style="list-style-type: none"> Public meetings; Development of small projects initially that could show results early; Publicised activities. 	<ul style="list-style-type: none"> Visible projects where benefits could be seen. 	<ul style="list-style-type: none"> Publicising the activities; Canvassing for members. 	<ul style="list-style-type: none"> By demonstrating what can be achieved through small projects and environmental improvements. 	<ul style="list-style-type: none"> Running of research projects; Negotiations of exemptions from national law on basis of experiments; Helping each other with agri-environmental applications.
Communication with membership.	<ul style="list-style-type: none"> Local newspaper; Two annual meetings for membership; Bi-annual newsletter; Discussion groups; Social gatherings. 	<ul style="list-style-type: none"> Members invited to bi-annual meeting; Plan a newsletter and website link on regional website. 	<ul style="list-style-type: none"> Representative of PION addresses ZLTO branch meetings; Participation in projects; Newsletter, website. 	<ul style="list-style-type: none"> Ad hoc, day-to-day, telephone meetings. 	<ul style="list-style-type: none"> Have bi-annual meetings of the membership; Smaller groups meet on specific projects. 	<ul style="list-style-type: none"> Letters, emails; Produce a quarterly newsletter; Projects; Social events; Membership meetings 3-4 times per year; Study groups. 	<ul style="list-style-type: none"> Meetings; Newsletters; Website; Participation in projects; Discussion groups.
Does the EC have defined geographical boundaries?	<ul style="list-style-type: none"> Around the R.Linge, within the boundaries of the R.Rhine and the R.Vaal; Covers 5 municipalities. 	<ul style="list-style-type: none"> National Park area, bounded by urban area and motorway. 	<ul style="list-style-type: none"> South LTO six branches/ municipalities. 	<ul style="list-style-type: none"> Very specific area adjacent to a main dyke. 	<ul style="list-style-type: none"> Municipality of Kollumer Lans. 	<ul style="list-style-type: none"> Boundaries the R. Lek, R. Rhine and the R. Noord; However accept any members willing to support EC. 	<ul style="list-style-type: none"> VEL and VANLA municipality boundaries
Is this the only EC in area?	Yes.	<ul style="list-style-type: none"> There is another small group of part-time farmers, but they have not developed into a formal EC. 	Yes.	Yes.	<ul style="list-style-type: none"> Yes. Combined certain functions with other local EC to form umbrella: Northern Frisian Woodlands Group. 	<ul style="list-style-type: none"> No. Several other smaller EC have emerged. 	<ul style="list-style-type: none"> Yes; Combined certain functions with other local EC to form umbrella: Northern Frisian Woodlands Group.
<p>* LTO is the Dutch Farmers Union. **Staatsbosbeheer is the State Forestry Commission. Besides managing forestry, it is one of the largest professional bodies recognised and accredited by the state for managing nature reserves. ***Provincial Landschappen: Provincial Landscape Board. †Member of the six local ZLTO branches (Dutch Farmers Union, Southern Branch) automatically members of the PION.</p>							

“I do not see any advantages because the people who have always opposed the work of Den Hâneker would then become members and then you have to compromise with them. Then you lose your progressive vision”, (farmer member (5a) – Den Hâneker).

There was an ongoing debate about who should be offered membership. In particular, the merits of allowing membership to non-farmers were keenly argued. Two views from members of the same EC illustrate this:

“For the first five years it is best to keep the EC as a small group. When you get more visibility and more size then, after five years, you can consider letting non-farmers become members. But you really have to consider it carefully”, (farmer member (2c) – Meander).

“If non-farmers have something to offer, to strengthen our position then why not? For example if they do the maintenance of woods/hedges they could get firewood..... why not?” (farmer member (2b) – Meander).

Non-farmer members expand the EC’s network, offer additional skills and, retirees and pensioners in particular, often had time to undertake administration. However, it was widely felt that non-farmer members may weaken farmer control, especially in the group’s formative years. There was evidence that ECs which welcomed non-farmer members had different characteristics from those which excluded them. The view of a representative of The Netherlands Ministry of Agriculture, Nature Management and Fisheries (MinLNV) was that membership of non-farmers was reflected in the activities and attitudes of an EC:

“I think there is a difference between environmental co-operatives that exist mainly for farmers and those environmental co-operatives with non-farmers. I think there is a big difference. Environmental co-operatives that only work with farmers tend to defend farming a little bit more”, (interview with MinLNV).

Many interviewees believed that their ECs should offer non-farmers membership but only after the scope of the organisation had been agreed and its structure and management board established. Therefore, the activities of many ECs, particularly in their early years, largely reflected the views of farmers.

PHASE 3: CREATING THE ORGANISATIONAL STRUCTURE

All ECs had adopted a similar management structure. Each had a Management Board (sometimes called an Executive Committee) with an elected Chair, Secretary, Treasurer, Chairs of Sub-committees and (often) members without portfolio. The Management Boards met monthly, holding structured and minuted meetings. Sub-committees were generally formed in larger ECs to manage work contracts and initiatives. There were meetings of the full membership typically twice a year; all held an Annual General Meeting. PION had a slightly different structure. Since 2000 all members of ZLTO (Southern Branch of the Dutch Farmers Union) automatically became members of PION so ZLTO branch meetings often discussed PION related business. This arrangement meant PION had the largest membership of all ECs, enabling it to support the most diverse portfolio of activities, each of which was managed by a working group of (typically) five elected members which met monthly and reported to the Management Board. Kollumer Grien also had a different structure; it is a much smaller EC with fewer activities, with its business overseen by the Management Board without sub-committees.

The ECs all had a similar legal status, being registered as Associations (Verenigingen), the most popular legal structure for ECs (Polman, 2002). To become an Association, ECs registered with the local government and adopted the equivalent of “Articles of Association” governing their activities (so, despite their name, very few ECs are legally registered as co-operatives). Some ECs, generally those that wanted to purchase land or other assets, registered as Foundations (Stichting) (the distinction being that Foundations do not have members but are more suitable vehicles for owning assets).

During the start-up phase of an EC, most work was done by members voluntarily. As the work-load expanded many employed staff (Table 4). Newer ECs tended to be smaller with less need for paid staff. The long established Kollumer Grien had no paid staff due to its small portfolio of activities. On the other hand, Den Hâneker had two full-time and two part-time paid staff, reflecting a large membership and an extensive portfolio of activities. De Lingestreek is slightly unusual, as a smaller, newer EC, in having employed staff, albeit for only a few hours a week. ECs have also benefited at times from staff provided by local and provincial governments, support from the Dutch farmers union, external research organisations, development agencies and educational institutions (such as Wageningen University).

Assistance from government and quasi-government organisations has been a key factor in helping establish and support ECs, particularly during their difficult early years. In 1994 the MinLNV supported six ECs by granting them “administrative status”. They received financial and technical support to develop better management options to existing farming practices whilst meeting the same environmental objectives to the generic environmental management prescriptions on offer (OECD, 1998). All ECs, those with and those without “administrative status”, sought financial support from other funders, principally local and municipal governments. To spread their resources and support more broadly all ECs, the MinLNV withdrew “administrative status” designations in 2000. Changing support from ‘deep and narrow’ to ‘broad and shallow’ was not popular with many commentators (Glasbergen 2000; Wiskerke *et al.* 2003) principally because it reduced the ECs ability to develop locally-specific environmental management options. However, widening support benefited the vast majority of ECs.

Table 4. Staffing levels and roles.

	De Lingestreek	Meander	PION <i>(formerly De Peel)</i>	Zwartemeerdijk	Kollumer Grien	Den Hâneker	VEL/VANLA
Does the EC employ staff?	Yes.	No.	Yes.	No.	No. But NFW* has three staff seconded from LTO.	Yes.	<ul style="list-style-type: none"> ▪ Research project management staff attached to EC; ▪ NFW has three staff seconded from LTO.
How many staff are employed?	<ul style="list-style-type: none"> ▪ 1 part-time 	n/a.	<ul style="list-style-type: none"> ▪ 3 part-time staff. 	n/a.	n/a.	<ul style="list-style-type: none"> ▪ Two full-time; ▪ Two part-time. 	n/av.
What are their roles?	Co-ordinator (4 hrs/wk)	n/a.	<ul style="list-style-type: none"> ▪ Project Co-ordinator (part time); ▪ Project Worker (3days per week); ▪ Financial administrator (P/T). 	n/a.	n/a.	<ul style="list-style-type: none"> ▪ General Secretary (P/T); ▪ Project Worker Agriculture and Tourism (P/T); ▪ Project Workers: Health Care and Agriculture (2 full time). 	<ul style="list-style-type: none"> ▪ Project management.
What services are provided by the EC?	<ul style="list-style-type: none"> ▪ Organise landscape projects of local interest; ▪ Organise lectures and information sessions; ▪ Representative group. 	<ul style="list-style-type: none"> ▪ Project work-plan drawn up; ▪ Project proposals in place; ▪ Seeking funding and commitments to develop projects. 	<ul style="list-style-type: none"> ▪ Comprehensive range of projects offered. 	<ul style="list-style-type: none"> ▪ Development of environmental projects for the enhancement of the area; ▪ Application for collective agri-environment schemes; ▪ Record-keeping for members; ▪ Representation, networking. 	<ul style="list-style-type: none"> ▪ Organisation of the Land Consolidation Programme; ▪ Representation and networking on behalf of members; ▪ Development of new projects. 	<ul style="list-style-type: none"> ▪ Promotion of the role of farmers in nature conservation; ▪ Co-ordination of agri-environment collective applications; ▪ Self-monitoring, operate an internal system of payment by results; ▪ Representative group. 	<ul style="list-style-type: none"> ▪ Developed a number of research projects; ▪ Co-ordinate and assist members in the application for agri-environment measures; ▪ Representative group.
n/a=not applicable; n/av=not available. *NFW is Northern Friesian Woodlands, an umbrella organisation for six neighbouring EC.							

The principal mechanism for government support of ECs was the new agri-environmental programme, Programma Beheer (2000). This favoured ECs by including options that encouraged collective management, for example, by giving priority to applications from collectives for selected management options. MinLNV also helped establish - and continues to support - Natuurlijk Platteland Nederland (NPN) – an umbrella organisation offering advice and assistance to ECs and representing them on government policy committees. Furthermore, it challenged the European Commission when banned from making payments directly to ECs. Now NPN can offer financial support to ECs' in their first four years. This helps meet overhead costs in those early years such as hiring meeting places, advertising to grow membership and paying for professional advice. In these ways, MinLNV showed the value it places on the activities undertaken by ECs.

In addition to government financial support and project funding, most ECs charge a membership fee. This is often a flat payment (of about €25/year), but in some ECs is linked to farm size. Again, PION is unusual, in that its membership fee is paid by a €10 transfer from ZLTO subscriptions. Some ECs, such as Meander, while in their start-up phase, did not levy a membership fee until they had delivered evidence of the benefits they could offer.

BARRIERS TO ESTABLISHING A SUCCESSFUL EC

It is important to manage establishment, growth, and organisational structure, sensitively, paying regard to local circumstances and conditions. But there are generic problems which all ECs face. One of the most difficult is identifying leaders.

“I think that you need one or two or three persons who will take the initiative and inspire the rest of the group to believe it is necessary. I think that is the main key on how to be successful and how to start-up”, (employee of Natuurlijk Platteland West (10)).

Many potential leaders simply did not have the time to pull together and drive forward a fledgling group. “First contact” with potential members needed careful

management as an EC sought to expand membership. For example, a farmer non-member decided not to join following his first contact with the local EC.

“A man came to the farm on behalf of Den Hâneker. He was not a farmer, he was a “nature man”. He said you have to do this, that and the other: you have to keep the trees, maintain the landscape. He demanded that this be done. The farmers of Den Hâneker did not come, they sent someone else.” (farmer non-member (5b) - Den Hânaker).

Some ECs (e.g. De Lingestreek) welcomed the participation of farmer non-members in their activities, thereby providing no incentive for them to become members.

“..... why should we bother [to become members]..... it doesn't really matter if you are a member or not”, (farmer non-member (1d) – De Lingestreek).

The ‘hold-up’ problem was mentioned by one farmer non-member as the most important reason for not joining the EC.⁴ His concern was that if he voluntarily agreed to adapt his farming system to secure environmental payments, the new farming system would then become the standard practice for which he would no longer receive compensatory payments. This was a widely acknowledged problem.

“They [farmers who are not members of EC] feel threatened. They are afraid that the nature and landscape activity and measures are restricting their agricultural activities. They consider it more a threat than an opportunity”, (farmer member (1b) – De Lingestreek).

Despite limited communication between the ECs and non-members, it did not appear non-members lacked an appreciation of the benefits ECs delivered to their members.

“The main reason why people join [ECs] is to gain income. People become a member if they share the aims, but also are closer to the fire [i.e.

⁴ The hold-up problem refers to the altered negotiating power of signatories once the agreement lapses. If ones negotiating powers will be compromised by a short-term agreement, that party has less incentive to enter into that agreement

learn of possible opportunities before others]”, (farmer non-member (1d) - De Lingestreek).

Many of the problems illustrated above will be familiar to organisations which regularly visit farmers to develop voluntary environmental management plans. For example, a list of best practices developed by the Westcountry River Trust (WCRT), which works with UK farmers to identify changes in management practices that benefit both the farmer and the environment, includes; maintaining confidentiality, offering independent advice, visiting every eligible farmer, paying particular attention to the needs of each individual farmer and farm, developing projects that suit their circumstances, producing a magazine to keep farmers informed of changes, developments and progress, offering training to farmers, and helping farmers access any grants. The barriers to successful collaboration can therefore be managed by careful thought and planning, and by adopting best practices.

DISCUSSION

A summary of the advice most frequently offered by interviewees to encourage farmers to establish an EC includes:

- The need to identify leaders to pioneer the project. “To look for key figures [people] who may be open to this kind of activity, pioneers already”, (farmer member (3e) – PION).
- Finding a common issue to unite farmers (this may be an opportunity or a threat). “Initially, look to see whether there is any possibility for joint activity, there should be something you can do”, (farmer member (4b) – Zwartemeerdijk).
- Finding a real focus for activities. “Don’t start for the subsidy.... [don’t start] because you get paid to start up an EC”, (farmer member (4a) – Zwartemeerdijk).
- Initially organising small projects that show quick results to demonstrate the benefits of the EC to members and potential members. “When you start a

group, you must have results within a year”, (committee member, farmer (3c) - PION).

- Communication between members and prospective members including non-farmers is essential. This develops networks and the involvement of non-farmers gives an EC greater credibility. “To have a good spirit, you must have more groups involved with the EC, not only farmers”, (farmer member (7a) – VEL/VANLA).
- An EC needs a range of funding providers and should not be dependent on a single funder.
- An EC must emphasise societal goals, which often transcend farmers’ goals.
- A final piece of advice. “The advice is ‘Do it’”, (farmer member (4c) - Zwartemeerdijk).

The emphasis on identifying suitable leaders shows the importance of creating and building trust between members and between the EC, potential funders and supporters. It is important to demonstrate to members the value of an EC, and selecting activities that unite the group and which yield quick benefits is critical. It is then necessary to communicate aims and activities to a wider audience and to establish networks with other stakeholders to develop a portfolio of activities supported by a range of funders and not be dependent on a single funder. It is often at this stage that non-farmers are welcomed as members.

However, for ECs to be successful, farmers need to be convinced that their interests are best served by voluntarily working together as a collective. Voluntary instruments “are designed to *encourage* changes in behaviour, usually to adopt behaviour that makes commercial sense or to raise compliance with existing regulatory standards.” (DEFRA 2004b: p. 10 and 11). But voluntary action is one of four instruments that can be used to help manage the environment, the others being:

- Information instruments, such as free advice raising awareness to *facilitate* a change of behaviour, and
- Economic instruments such as taxes or grants, to *incentivise* a change of behaviour, and

- Regulatory instruments, such as licences or standards to *require* a change of behaviour.

Given these instruments, why should a government/environment agency support organisations such as ECs? Sometimes voluntary instruments are particularly valuable when other instruments are not feasible, would be inefficient and/or highly unpopular, for example, in addressing flooding and diffuse pollution. There are many examples of the use of voluntary instruments in the agricultural sector: quality-assurance schemes and codes of practice, agreements between water companies and farmers (regarding discharge of pollutants in water – which may be financially or altruistically motivated), and between nature conservation organisations and farmers.

Voluntary instruments have the advantage that they can be offered to the sector as a whole, and can be tailored to collective rather than individual responses, for example, the UK's Crop Protection Association's Voluntary Initiative.⁵ Moreover, this can be combined with the direct or implied threat that an inadequate voluntary response by the sector will result in a statutory scheme with higher costs on farming. This improves the likelihood of compliance with "voluntary" agreements.

Voluntary agreements succeed in win-win activities. In a win-win agreement, the farmer receives benefits from cost savings or increased revenue and there are environmental benefits generally through improved resource management practices.⁶ The principal barriers to the uptake of win-win solutions are (Environment Agency (2003)):

- unawareness that these opportunities exist;
- difficulty in finding comparative case study information;
- lack of detail in case studies on which to base business decisions;
- limited measurements of the costs saved by implementing changes requiring estimations of savings;
- a preference by farmers for pay-win solutions – when payments prompt action even if the activity would provide a win-win solution;

⁵ More details of this are available on the CPA website: http://www.voluntaryinitiative.org.uk/Content/Agr_Advice.asp

⁶ The agricultural community is accustomed to pay-win solutions; those in which the farmer receives a payment from which the environment wins.

- unwillingness to invest in facilities – particularly by older farmers, those with no identified successor and, with the uncertainties of the current reforms of the CAP, those adopting a wait and see attitude.

Win-win activities can be identified from discussions between environmental organisations and farmers. Our survey showed that farmers can feel empowered in these situations by their membership of a like-minded group. There were many examples of ECs stimulating innovative learning processes within the farming community and initiating effective action – often by combining farmers’ local or indigenous knowledge with science-based knowledge. Dutch ECs play a vital role bringing together diverse groups with overlapping interests in land use and environmental conservation and protection. Their role as boundary organisations enables them to facilitate discussions between farmers, conservationists and government agencies to identify win-win strategies.

But whilst self-help groups, such as ECs, make valuable contributions to overcoming difficult environmental problems, it seems unlikely they will gain sufficient support among the farming and land-use community for governments to rely on voluntary instruments alone to meet environment goals. Although a membership of 7,500 farmers in ECs is impressive, it represents only 10% of Dutch farmers, albeit about 40% of farm land (Oerlemans *et al.* 2004). Packages of instruments will need to continue to be used, but the role voluntary measures play needs to be re-examined especially where compulsory instruments are not possible. It appears that the “essential question is not whether compulsory measures are more efficient than voluntary ones, but how they can be combined [with other instruments] in an efficient way” (Bager and Proost 1997: p. 94).

A primary determinant of the choice of regulatory methods adopted by government/environment agencies is farmers’ behaviour. Two factors influencing farmers’ environmental behaviour are group attitudes (Bager and Proost 1997; Defrancesco *et al.* 2008) and the information environment (Wilson 1997; Siebert *et al.* 2006; Defrancesco *et al.* 2008; Cross and Franks 2007). Sharing groups encourage farmers with similar interests to join together and to learn from each other new practical solutions to problems. Recent research in Italy suggests that farmers who accept advice from other farmers are more likely to participate in environmental

programmes (Defrancesco *et al.* 2008). Previous studies into the role of ECs drew similar conclusions.

“Looking back over the past 20 years, the development mentioned most frequently by the respondents as the most important development for farmers’ participation in biodiversity enhancing schemes is the changing attitude among farmers’. Societal pressure, compensation payments and the emergence of agri-environment co-operatives are the second most frequently mentioned developments”, (Groeneveld *et al.* 2004: p. 34).

The UK’s Department of the Environment and Rural Affairs (DEFRA 2004b) recognises that rational individuals do not voluntarily make themselves worse off (unless they are altruistic). This recognises that voluntary instruments will not succeed if they involve a significant net cost for those adopting them. Most reviews of farmers’ reasons for participating in agri-environment schemes agree that financial matters are important, but by no means the only influence (Siebert *et al.* 2006). Moreover, Bager and Proost (1997) argue that fewer farmers are now strictly utility maximisers (as economic theory predicts) and more are collective maximisers (as political rational choice theory would suggest). Collective, voluntary action may arise from historic patterns of sharing and co-operation, but the inexorable logic that environmental problems are best addressed at the appropriate scale is an attractive argument to “collective maximisers”; and to deliver this voluntarily requires farmers to organise on a scale larger than the individual farm.

CONCLUSIONS

This paper develops a model for establishing green co-operatives drawing on evidence from a survey of Dutch ECs. In the Netherlands, ECs have become a valuable instrument for environmental management. They bring together diverse groups to identify and deliver win-win solutions to environmental problems; their particular contribution is to implement management options that address environmental problems related to the scale of the problem (whether that is a catchment or landscape) rather than individually, on a farm-by-farm basis.

There appear no substantial reasons why ECs or like organisations could not deliver similar benefits elsewhere given that many of the environmental issues confronting Dutch farmers are also faced by farmers across Europe and around the globe. Land managers, conservationists and government agencies need to recognise the mis-match between the scale of many environmental problems and the typical farm. If farmers believe that collective action could improve their lot, then forming ECs would be a positive step towards constructive engagement, business development and environmental enhancement. Once the benefits of bringing together the different groups to develop and successfully deliver new projects has been demonstrated, the Dutch example suggests that governments/environmental agencies might make available additional, tailored support. As the benefits of membership grow, other groups will form.

This paper has shown that the barrier to establishing EC-like organisations can be overcome by a small group of farmers if they have a shared interest and are united by a key project or challenge. Coalescing into voluntary groups will help safeguard their interests whilst helping to address some of the environmental problems not easily managed by the statutory process.

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