

## *The Environmental Cooperative: Self-Governance in Sustainable Rural Development*

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*This article explores the advantages and risks of a new form of self-regulation in the Netherlands. The focal point is the environmental cooperative: a regional organization in which farmers collaborate to integrate environmental values into their production process. The body of this article begins with a discussion of the background of these innovative collectives. It then examines a few concrete examples in greater detail. The question guiding the discussion is if and how the environmental cooperative can contribute to such a broad national planning goal as a more sustainable development of the rural area.*

**P**utting sustainable development into practice in agricultural production processes appears a painful road. Foremost, it demands a fundamental review of the relationship between agriculture and its physical and social environment.

Traditionally, farmers have been regarded as close to nature. With today's highly intensive farming practices, this image has been destroyed, and farming is now regarded as one of the most environmentally disruptive social activities. Modern agriculture is an important source of pollution (e.g., acidification through ammonia emissions) and damages nature and landscape. Agriculture seems to be trapped in what has been called "the iron law of agricultural pollution control." This "law" states that policy making advances reactively through a succession of crises, the pace of change being dictated by an entrenched agricultural policy community staunchly opposed to any far-reaching environmental measures. The iron law has been the token of an ineffective environmental leadership and management in agriculture in many European countries (Glasbergen, 1992).

Faced with an ineffective agroenvironmental leadership, the reaction has always been more top-down regulation. More recently, a Dutch experiment turned this classic steering upside down. Over the past several years, new institutional arrangements—the environmental cooperatives—have been created to deal with complex agroenvironmental problems.

They fit into a general trend of harnessing energies outside the public sector in furtherance of public policy. In this connection, Grabosky (1995, p. 198) speaks of "new technologies of governance." New technologies of governance promote the self-regulating capacity of private



parties to develop an approach to solving problems. Instead of restricting private parties' alternatives for action, governments give them more scope in formulating policy to be able to deal effectively with the problems. Governments mainly play a role at norm-setting and goal-setting moments (Ayres & Braithwaite, 1992; Glasbergen, 1998; Healy, 1997; Kooiman, 1993).

This article explores the reasons why environmental cooperatives are forming among farmers in the Netherlands, describes some of the features of these organizations, and analyzes the risks and opportunities of this kind of self-regulation in rural development. It is based on a general study of the phenomenon and in-depth study of two specific cases—the activities they undertook and interviews with stakeholders, both within the cooperatives and actors of their social environment. The traditional notion of governance compared with aspects of self-regulation are reflected in the following:

- Main actors—  
In the context of hierarchical governance, the main actors are governments. In the context of self-regulation, the central role is played by organizations of collective interests.
- The point of departure for governance—  
Generic national aims are usually the point of departure in hierarchical governance. In the context of self-regulation, governance is usually based on the problems confronting a group, sometimes under preconditions.
- Social relations between the actors—  
In hierarchical governance, the social relations are determined by formal rules. There is little voluntarism, and consensus is weak. In the context of self-regulation, social relations are characterized by informal rules, voluntarism, and conformity.
- Coordination principle—  
Hierarchical governance is concerned with external power and authority, which are expressed in formal regulations. Self-regulation consists of voluntary mutual agreements and action-oriented projects.
- Democratic legitimization—  
In hierarchical governance, legitimization must be formalized. In self-regulation, this is not necessarily the case.

### *Renewal of Rural Areas*

The form of self-governance that we examine here has to be positioned in a national planning vision. For some time, the renewal of rural areas has been a national policy aim in the Netherlands. The issues at

play in rural areas have changed radically in just a few decades. The changes may be characterized as a shift away from the problems of an agrarian production space toward the problems of a differentiated residential area. Until recently, the government chose to gear its activities to the promotion of agricultural development from the central position characteristic of hierarchical steering. That policy has been successful. After World War II, the Netherlands turned into a major agricultural power. Enlargement of scale, specialization, and intensification were the key words of the policy. The result was a great increase in productivity. But greater productivity went hand in hand with a decline in the number of farms and the amount of land under cultivation. In 1955, for example, 319,000 farms had more than 2.3 million hectares of arable land at their disposal. By 1995, only 113,000 farms were left, working 1.9 million hectares of arable land. Some of the space that became available has been devoted to other uses. Besides the agrarian function of the rural area, other activities have become increasingly important: the conservation and development of nature, recreation, removal of topsoil, and road construction, for instance. Moreover, there are signs of a gradual urbanization of rural areas; this process of encroachment of other functions on the countryside is still going on.

The economic success of agriculture has a shadow side, however. Virtually nowhere in Europe is the environmental load caused by agrarian activities as great as in the Netherlands. The impact on the environment takes many forms: chemical pollution, desiccation, fragmentation of nature reserves, reduction of biodiversity, and loss of heterogeneity in the landscape. Recently, the issue of animal welfare has been given unforeseen exposure and has risen sharply on the policy agenda. In 1997-1998, swine fever devastated the pig-farming sector; 3 million animals—a third of the stock—had to be destroyed. Swine fever, though destructive, was not the only reason for the impending decline in the economic position of the agrarian sector, however; developments in the European and the world markets also play a role (Driessen, Glasbergen, Huigen, & Hijmans van den Bergh, 1995).

The problems of rural areas have thereby become wider in scope. The problem is no longer how to raise productivity in agriculture; the main task is to accommodate and regulate different and often conflicting claims on space. That task has to be performed in a situation whereby it is generally felt that the quality of the environment is poor and needs improvement in the short term. With respect to national policy, this has led to a new and ambitious vision for governance. The policy seeks to enhance the socioeconomic perspectives for agriculture while improving the quality of physical space and the environment. These elements are combined in what has been called the pursuit of sustainable development of the rural area. Key features of this policy are a process-oriented approach, regional differentiation, and private participation.

*A process-oriented approach.* A large number of public and private actors make a different claim on the use, development, and management of the rural area. These claims reflect diverse definitions of the problem and different interests. These interests are partly economic; to some extent, nonmaterialistic values (e.g., nature conservation) also play a role. Some claims can go hand in hand; for instance, forest development and forms of recreation that do not make intensive use of land. Other claims are more likely to run into conflict—the incompatibility of nature conservation and intensive agriculture is a good example. Because the rural area is the domain of many actors, governance in the direction of a projected end point has become practically impossible.

*Regional differentiation.* The developments that will take place in the fields of agriculture, nature development, recreation, the environment, and housing also leave their mark on the essential characteristics of the rural area. It should be noted that regions can generally be distinguished by their specific environmental conditions, by specific modes of agrarian operation, and by specific nonagrarian activities that take place there. This makes it imperative to conduct a regionally differentiated policy, one that takes differences in dynamics and development into account. Alongside its function as an operationalization level, the region has now taken on the function of a differentiation level as well (Driessen & Vermeulen, 1995, p. 159).

What we are looking at here is a transformation process in which agrarian areas are becoming multifunctional rural areas. We are facing a reconsideration of spatial claims on those areas and, as a result of any ensuing revisions, a demand for a new administrative approach. Initiatives for self-governance emerged under these conditions as a new attempt to realize a guided type of change in the rural area.

### *The Emergence of New Cooperative Arrangements*

It was in the dynamic context of the early 1990s that farmers in various places took new initiatives themselves. They wanted to give their own particular interpretation of what it means to renew the countryside. Their efforts were expressed through the vigorous growth in the number of regional cooperative arrangements. In most cases, these were a response to economic pressures. Farmers feel threatened by the termination of subsidies and guaranteed prices. The impact of that policy is accentuated by the introduction of environmental measures, which also erode their economic position. A third development is the slant given to nature policy, which profiles itself through making new claims on the country-

side. In reaction to this development, people in different places join forces in some organizational form (foundation, association, etc.) to look for new markets. Usually their efforts lead to small-scale projects, sometimes to subsidiary activities. In either case, the efforts are expected to have the potential to generate extra income. The projects are usually presented to the public as initiatives to promote an agricultural sector that is sustainable and environmentally friendly. Although pursuing the same goal, these initiatives are highly diverse. Some bring a product to the market that is peculiar to a region. Others are geared to organic farming. Yet others look for opportunities in small-scale recreational facilities. A large number of projects turn their attention to nature conservation as a new activity. A few of those projects are also concerned with environmental protection.

By now, roughly a hundred initiatives have been located, ten of which set out to achieve multiple goals. In any case, they seek to create sources of income, but the motivation goes beyond any monetary benefits. Sometimes ethical motives play a role (as in organic farming, for instance). Often, however, the projects are based on a negative argument—namely, a critique of government policy. The argument runs in this manner: It should be possible to get farmers more closely involved in nature management. Supposedly, they would be able to do the work for less money than the nature conservation organizations could. With respect to environmental pollution, the criticism is often directed to the effectiveness of government policy. If the farmers themselves were able to tackle the abatement of emissions in their own area without running into strict norms and obligations, they would supposedly be in a better position to achieve the targets. Better in this context means that the whole production sector would retain its vitality. These motivations have not been worked out in detail, however. They are used to profile an activity, in many cases also to give it legitimacy, but they are still in the stage of preliminary elaboration.

### *Operationalization of the Concept of Environmental Cooperative*

These new initiatives were recently brought together under a single heading: the environmental cooperative (Van Dijk, 1990, 1994). Thus, they have been placed in the perspective of a theoretical notion that purports to create new chances for a threatened agricultural sector.

Cooperatives have been around a long time in the farming world. Individual market shares are negligible in agriculture, whereas sales markets are neither transparent nor readily accessible. By joining forces, individual farmers have proved able to strengthen their market position.

They were able to further enhance that position through enlargement of the scale of cooperation. A cooperative is thus a reaction to an observed market situation. By coordinating supply and demand, the individual farmer could achieve economic advantages that he could never reach on his own. The format of the environmental cooperative was introduced with these advantages in mind. The environmental cooperative is an organization in which the members see a common interest in producing environmental quality for pay. It may be described in terms of its three core elements:

1. Environmental considerations must be adapted to the management style in a manner that does justice to the opportunities and limitations of the way the farm is operated.
2. When farmers make a special contribution to the environment by doing more than others or doing it sooner, they must be rewarded financially for their performance.
3. The best way for the farmers to arrange for their future is in a supralocal but region-bound form of cooperative action.

The notion of the environmental cooperative is grounded in the idea that a market should be created for environmental pursuits. That market could function as any other. Society has expressed a need for more care for the environment, nature, and the landscape. Agricultural enterprises are in principle able to deliver the environmental quality the public demands. At present, however, the environmental market is not (yet) functioning. The bottleneck is in the private sector, which does not know how to coordinate the behavior of the suppliers. By forming a cooperative, farmers can start to deliver environmental quality at a specified price. This train of thought has, as an example, been worked out for emission restrictions (Slangen, 1992, 1993). The reduction of emissions may be seen as environmental production, and a farmer may be rewarded for supplying that product. The consequence of a lower level of emissions reached by one enterprise is that another one has greater scope for using the environment. The former has produced an environmental good in an economic sense, and its actions should be rewarded (by granting subsidies). The latter has generated pollution and should be punished for its actions (by imposing levies). In addition, a system of tradeable emission rights might be a possibility. The environmental cooperative would be able to set up such a system by making it mandatory to bring the net amount of emissions in an area down to a level the farmers voluntarily agree on in negotiation and consultation with the government. However, not everyone who has adopted the notion of an environmental cooperative emphasizes this aspect. Instead, they direct their attention to other activities that lend themselves to self-governance in cooperatives. The production of nature and landscape is often

mentioned, sometimes as part of a wider package of policy priorities (Migchels & Hagelaar, 1994; National Cooperative Council [NCR]/Heidemij, 1991; Touwen & Fleischer-van Rooijen, 1993).

The discussion up to this point may be summarized in the form of an aggregated profile of an environmental cooperative.

- Organization of the reduction of the regional environmental load and the development of a valuation and reward system for that purpose;
- organization of the supply and sale of high-quality and environmentally friendly products;
- maintenance of nature and landscape;
- organization of technical aspects such as the storage of manure, its removal, processing, and sale;
- advice on environmentally friendly management and the development of and advice on relevant administrative and information systems; and
- promotion of research, education, and public information in the area of the tasks of the cooperative.

According to estimates, slightly more than 2% of all agricultural enterprises are involved in the new initiatives. The importance of the phenomenon is greater than the numbers would suggest, however. That 2% represents the pioneers in the quest for a way to deal collectively with issues of sustainability. These advance groups have drawn the attention of the news media, researchers, and policy makers (Horlings, 1996, p. 188).

### *Environmental Cooperatives and Traditional Agrarian Interest Groups*

Environmental cooperatives are essentially different from the traditional agrarian interest organizations. The purpose of the latter is to defend the interests of all farmers or those in a sector of the agrarian economy. In doing so, they devote much attention to increasing the productivity of the sector in general and of export-oriented agriculture in particular. Environmental cooperatives are small organizations, with a membership of anywhere between 25 and 200 farmers, that are primarily active in a broad range of individual and collective interests. There are also major differences between these organizations and agrarian protest groups, a phenomenon with a long history in the countryside. The only similarity lies in their common point of departure: discontent with present conditions. Protest groups mainly take a defensive position and seek short-term results. Environmental cooperatives adopt a more proactive stance, setting their sights on sustainable agriculture. For that reason, their aims are by definition long-term developments. The strategies



used by protest groups are different as well. They usually include physical action, such as demonstrations and road blocks. Environmental cooperatives, in contrast, try to build up a collaborative relationship with actors who are relevant to them: agricultural organizations, governments, agribusiness, organizations for nature and the environment, and agricultural schools. The operational strategies taken by the environmental cooperatives are thus largely the same as those of the traditional interest organizations. One last difference between environmental cooperatives and protest groups is that the former also turn their gaze inward, promoting change in the way agrarian businesses are operated, whereas protest groups are primarily outward oriented and try to change the conditions under which they work (Horlings, 1996, p. 189).

### *The Potential Added Value of Environmental Cooperatives*

It is also possible to identify an added value of environmental cooperatives that traditional interest organizations and protest groups do not provide. That added value comes mainly from the roots of the movement. Environmental cooperatives are organizations of and for farmers pursuing an integrated set of goals at a limited spatial scale. The renewing impetus lies in their pursuit of integral solutions, the view that running a farm cannot be seen in isolation from the quality of its physical surroundings and the ecological processes going on there. The environmental cooperatives explicitly state that modern agricultural policy can no longer be based exclusively on economic criteria. Their mission statement also specifies which resources are peculiar to a modern enterprise. It is crucial that the initiatives be based on a thorough knowledge of the spatially circumscribed area in which the members are working. Because the cooperatives have a special interest in the quality of the environment within spatially delineated areas, they are able to specify the content of regionally differentiated policy as well. They are well placed to play a role in clarifying which concrete problems are in play or to outline the historical, cultural, and social characteristics of the region. The cooperative is a nexus of personal contact among farmers, too. This is one reason why, in principle, cooperatives are able to defend their individual interests. As a consequence, the present environmental cooperatives enjoy a degree of legitimacy among their constituencies that is much greater than that of other parties. In addition, cooperatives offer the advantage of serving collective interests. Together, the members can take a stronger stand in confronting their partners in consultation and negotiation. Because they join forces as a delegation, they are also taken more seriously in their external contacts. In the complex field of public



and private actors, they can serve as a catalyst to the resolution of disputes on issues of a more sustainable rural development.

### *Some Typical Cases*

At first, the public sector was hesitant in its response to the new initiatives, if not outright skeptical. However, it has since reversed its standpoint and offered active support. The response of the Ministry of the Environment was striking in that it quickly recognized the potential value of the initiatives (1993). It was the first public agency to provide funding so that one of the cooperatives could work its ideas out into a demonstration plan. It also made funding available to develop a model for an operational farm plan. The Ministry of Agriculture was quick to follow suit (1994). The decision to do so may be explained largely by the shift in policy in the early 1990s. The renewal of rural areas became the new goal of agricultural policy, and the ministry saw the potential of these new initiatives to work toward the same goal. In 1994, it granted a subsidy to develop a plan of action for five cooperatives. In 1996, a one-off subsidy of 19 million guilders was made available for projects to be carried out by farmers with respect to the renewal of the countryside and nature management.

Two typical cases are described below to set the stage for an evaluative analysis.

#### VERENIGING EASTERMAR'S LÂNSDOUWE (VEL)

One of the first environmental cooperatives to be established was the Vereniging Eastermar's Lânsdouwe (VEL). It arose out of discontent with the increasing burden of regulations. The direct impetus for setting up the VEL was the strict application of an ecological guideline. The contested decision was the designation of hedgerows as being sensitive to acids. As a consequence, many farms were no longer allowed to expand. Farmers who had maintained the hedges year in and year out were thereby punished for their efforts.

Farmers in the region generally found it difficult to fit the new laws and regulations on nature and the environment into the way they ran their operations. In their experience, the rules were difficult to implement, poorly attuned to each other, and in some instances contradictory to one another (Hees, Renting, & de Rooij, 1994, p. 11). People acknowledged the need to develop the sector in such a way that agriculture would be more compatible with the environment, nature, and the landscape. Thus, the VEL came into being in 1992. Since then, virtually all professional land users in the region have become members. The fact

that the VEL has already moved forward is demonstrated by the fact that its action plan—*It Lânjuwiel*—has been adopted as an exemplary plan in a national memorandum on spatial policy.

Agriculture in the region is characterized by a wide diversity in the way farms are set up and managed. The possibilities for development in the future vary from one farm to the next. Most farmers in the area are confronted with the following problems (VEL, 1994, p. 12):

- a great need for productive land for the relatively large number of successors who will be taking over operations;
- a considerable claim on agricultural land for space to develop nature reserves;
- in some parts of the area, a disadvantageous apportionment of land and plots that are too small; and
- uncertainty about environmental rules and manure regulations, making it unclear where, when, and which investments are needed and what the consequences will be for the future.

These typical problems are not the only ones facing farmers in the region. In addition, there are environmental problems that are caused in part by agriculture (VEL, 1994, p. 13):

- intake of contaminated water from a holding basin to infiltrate arable land,
- leaching and erosion of minerals and emission of ammonia,
- discharge of waste water,
- consumption of energy and water, and
- treatment of solid waste.

The mission of the VEL is to promote livability and to develop a sustainable balance between the environment, agriculture, nature, and the landscape. To achieve these aims, they have to find solutions to the problems listed above. In looking for solutions, their point of departure is that agriculture and other functions such as the environment, nature, landscape, and recreation are inextricably tied to each other. In fact, the interlacing of functions lies at the core of the development strategy for the region. When bringing the ideas into practice, a distinction is made between activities pertaining to the whole area and those geared to individual farms.

Area-wide activities are mainly concerned with the way agriculture is spatially interwoven with the environment, nature, the landscape, and recreational interests. This category covers a multitude of activities: an experiment with area-wide manure policy, programs to measure the quality of water and soil, management agreements for maintenance of landscape elements, creation of corridors to connect nature reserves (by

water and by land), upkeep of edges of fields, a wildlife management plan, and formulation of a recreation plan.

Activities geared to individual farms call for specific plans. A plan for an individual enterprise envisions at that level how the interests of the landscape, nature, and the environment—and perhaps also recreation—can be defended in relation to the operation of the farm in question. The farm plan consists of four parts: the landscape maintenance plan, the nature conservation plan, the environmental care plan, and a business bookkeeping plan. The party responsible for carrying out the farm plan is the farmer himself.

The VEL does not consider itself responsible for developing a system of financial governance, as described in the theoretical notion of the environmental cooperative. On the other hand, a number of farmers in the area are looking into opportunities for developing regional products, conceivably with a regional certification of authenticity (Renting, de Bruin, & Pohlmann, 1994, p. 87). The role of the VEL in bringing regional products to market thereby remains limited to creating sales channels at the local and the regional level.

#### MILIEUCOÖPERATIE DE PEEL (MCP)

Not only does the Peel region have a strong agrarian sector, its landscape and nature are also of particular value. De Groote Peel has been designated a nature reserve. At the same time, intensive livestock farming, cattle farming, and greenhouse horticulture lead to major environmental problems in the area. Acidification and overfertilization are the main causes. The Peel region is one of the most polluted areas in the Netherlands. By tightening the rules and guidelines for agrarian operations and by pursuing a spatial policy that is geared to separating nature and agriculture, the possibilities for the agrarian sector to grow are being restricted more and more (Hees et al., 1994, p. 55). According to the local farmers, it should be possible to accommodate agriculture in the plans for protecting nature. By establishing the Milieucoöperatie de Peel (MCP) in 1993, an attempt was made to counterbalance the plans being developed by the government.

The activities of the cooperative are mainly concerned with nature and the environment. The cooperative is investigating the following themes:

- more efficient use of manure, water, pesticides, and energy;
- reduction of ammonia emissions; and
- nature management by farmers.

Demonstration projects are now going on at various participating farms. The projects deal with various techniques: crop protection, energy use

and reduction in CO<sub>2</sub>, water and fertilizers, and organic herbicides. The demonstration projects are intentionally small in scale because this is the way the farmers prefer to carry them out. It is expected that if the results are promising, the support for alternative methods of cultivation could be increased. With respect to the environmental aims for the area, the MCP does not want to base its activities on assigned targets; they prefer to work in terms of an obligation to make an effort to achieve certain goals. Instead of tackling the problem of emissions at the level of the individual farm, they try to deal with it at the level of the area. In the opinion of the environmental cooperative, it should be possible to achieve a net reduction in the level of emissions for the area as a whole. This would be possible in the long term, as many farmers want to terminate their operations. Only half of the farms have a successor lined up at present. The average farm is fairly large, but the range is broad. There are also many relatively small farms, and they will probably not be able to survive in competition with the rest. When an enterprise is terminated, its production rights will become available. These could then be transferred partially to farmers who do want to continue and partially be creamed off. In this way, expansion opportunities can be created for farmers who want to increase their holdings and the environmental targets can be met, though it may take awhile. The national targets for reducing emissions are considered to be unattainable, at least for the time being. A system of tradeable emission rights is currently being set up as an experiment within the MCP. However, in view of the outbreak of swine fever, it is not certain that this experiment can be carried out. Nature management within the cooperative consists mainly of agreements made with the government to maintain landscape elements in exchange for money. At present, this would provide the farmers with a minor source of income.

The MCP is the first initiative that actually calls itself an environmental cooperative. The name was chosen deliberately, because cooperatives have been known for a long time in the region. The term *cooperative* has a definite appeal to the farmers, with the connotation of working together on something. The environmental cooperative is oriented toward working in an economically justifiable manner for the sake of a viable environment and a valuable landscape. The basic standpoint is that the farmer must be able to benefit from doing something for the environment. In that light, the MCP members feel that if they take measures for the sake of nature, the landscape, and the environment, the government should provide financial compensation. At present, producing in an environmentally friendly way usually involves making major environmental investments (which raise the cost of production) for which they receive little or no remuneration. In the future, the farmer who produces in an environmentally friendly manner will have to be rewarded. Moreover, his products must command a higher price. At the same time, levies will

have to be imposed on farmers who continue to work in the traditional manner, and the price they get for their products must be lower. Despite consensus on this standpoint, the parties are reluctant to get this process started themselves or to take final responsibility for organizing the process, a role that would be laid down in the form of binding mutual agreements.

### *The Environmental Cooperatives as Network Brokers*

In their present stage of development, environmental cooperatives place a strong accent on building networks, and they have proved successful in this area (Aarts & van Woerkum, 1996). In a relatively short time, they have been able to create an influential position for themselves. Their influence is based on the contribution of knowledge and know-how by the membership and on the contacts laid with other actors in the field: traditional interest organizations, agribusiness, government, environmental groups, and universities.

First and foremost among those contacts are the traditional interest organizations in agriculture. Initially, those parties were hesitant to respond to the overtures of the cooperatives. More than anything else, they feared their own position would be undermined. The environmental cooperatives, for their part, were afraid of being drawn into biased patterns of defending interests—that is, patterns of behavior geared exclusively to raising productivity. Meanwhile, it has become more clear what each side expects from the other and collaborative relationships have been forged. Environmental cooperatives can benefit from the communication links that have already been established by the interest organizations. In fact, they make incidental use of that structure. For instance, they use it to arrange an indirect membership of the districts in which the interest organizations are divided. The interest organizations, in turn, have a stake in the cooperatives' efforts to encourage the farmers to produce in a way that spares nature and is friendly to the environment. They are glad to leave this task up to the cooperatives because it is a theme that the interest organizations would have some trouble promoting without jeopardizing their credibility in national and international negotiations on the economic position of agriculture.

Another important actor is agribusiness. Environmental cooperatives ask these companies not only to provide financial support but also to actively contribute their knowledge and ideas about new markets. This knowledge can be helpful in finding markets for environmentally friendly products. The reorientation of agriculture is, of course, also important to industry. Manufacturers of livestock feed and banks

serving the agricultural sector, for instance, have come to recognize the significance of the initiatives for the future of agriculture. The private sector contributes to these initiatives by sponsoring projects. In fact, the MCP receives financial support from about 20 companies.

The government is the third important actor. As said before, the Ministry of Agriculture was hesitant initially in its response to environmental cooperatives. Subsidizing the five initiatives was seen as an experiment. Later on, this valuation changed. In 1996, the ministry even gave approval for an experimental exemption from regulations. Under that experiment, the MCP would be able to develop a system for imposing levies and awarding bonuses in conjunction with a bookkeeping system to track the production and processing of manure. At present, the Ministry of Agriculture is overtly seeking ways to collaborate with the environmental cooperatives. As part of that effort, the ministry is making money, human resources, and knowledge available. The ministry has also been inviting representatives of the cooperatives to attend symposiums and take part in other opportunities for debate, all in the framework of the renewal of the countryside. The environmental cooperatives have built up the same type of collaborative relationship with regional and local governments. For instance, the provinces provide financial support to set up an administrative system for the new initiatives. They also make funding available for projects, especially research projects. At the same time, they create scope for policy making. In that vein, the contested ecological guideline that had led to the founding of the VEL was rescinded on condition that the cooperative itself would maintain landscape elements.

Organizations concerned with nature and the environment constitute the fourth important actor in the field. The relations among these organizations and the environmental cooperatives differ widely from one region to the next. However, one thing the environmental cooperatives have in common is that they try to build up good communication with these organizations. The MCP is a case in point. For years, the relation between the farmers in the region and the regional environmental organization was fraught with conflict. Virtually every time farmers were granted a permit, the environmental organization contested the decision by starting legal procedures. In doing so, they drew on the extensive body of legislation in the field of nature and environmental protection, on which they are quite knowledgeable. Meanwhile, the relations have been normalized; the first step toward reconciliation was taken by the MCP. It was encouraged to make the contact by the fact that governments had made their support for the cooperatives conditional on endorsement of various plans by the local organizations concerned with nature and the environment. Specifically, those organizations had to agree to go along with the cooperatives' plans regarding integration of environmental and agricultural activities. The former adversaries have

since become partners. They undertake joint activities, though the relation remains fragile. In the end, farmers are looking for economic advantages.

Finally, the universities and other research and educational institutions are important actors in the field. Environmental cooperatives seek out these institutions for expert advice and reliable answers to their questions. This has led to a working relationship with Wageningen Agricultural University in particular, which was involved in formulating the action plans.

In view of the above introduction to the players in the field, it may be concluded that the environmental cooperatives are developing into professional organizations. They maintain working relations with traditional agricultural organizations whereby one side complements the other. They explore markets along with representatives of agribusiness. The issues they discuss with government are concerned mainly with funding and creating some leeway in the regulations. Organizations for nature and the environment are consulted with regard to the environmental targets and the means that can be provided to reach them. The contacts with research institutes are used to enhance the level of expertise. In maintaining all of these contacts, however, the cooperative never loses sight of the relationship with its own constituency. The aims of the cooperative, which are still fairly abstract, will have to be operationalized in the course of interaction with these other actors.

### *Markets for Environmental Cooperatives*

In light of the analysis of events up to the present, it may be concluded that the theoretical notion of the environmental cooperative has not yet demonstrated its full potential. The idea of an environmental cooperative is only gradually being molded into a real force. Financial levies and rewards have not actually been applied to any initiatives at all. In practice, little interest has been shown thus far in creating an environmental market, which is a key element of the notion. The initiatives have been focused on a few aspects of the profile sketched earlier. The fact that the initiatives do not reflect the full scope of the notion of the environmental cooperative does not mean that they have no impact on the renewal of the countryside. Under certain conditions, local initiatives can develop into valuable organizations for the farmers involved in them. But is it realistic to expect more than that? Is it realistic to assume that new markets will open up new avenues to a threatened agricultural sector? To answer this question, some attention should be given to the concept of the market. The discussions often refer to several types of market: the market of organic farming, the market of the production of nature, and the environ-



mental market. Those types are merged in the notion of the environmental cooperative.

The first type of new market is that of organically grown products. This is clearly still a traditional market, and it does exist; although it must be said that in the Netherlands it does not cover more than about 1% of the market for agricultural products. This market may still grow, but it is not expected to ever cover more than a few percent of the total market. It does contribute to the renewal of the countryside, albeit to a limited extent.

The second type of new market is that of the production of nature. This is not entirely a traditional market. There are (still) funds available for conservation areas where farmers would devote part of their agrarian activities to nature management. On a somewhat larger scale, however, this market must be created through government funding. It remains to be seen how big that market is and whether it is present in the right place. According to research findings, subsidized management by farmers has made only a limited contribution to the conservation of natural value in agrarian areas (van der Belt, 1994, p. 100). Furthermore, as a supplement to farm income, nature management makes a modest contribution, amounting to a few percent of a farmer's overall income (Fleischer-van Rooijen & Touwen, 1994). A more fundamental problem is that farmers want to manage nature as part of the agrarian landscape. However, the money for nature management will mainly be designated for projects to reinforce the structure of the major national nature reserves. From the perspective of the value ascribed to nature, this choice is self-explanatory.

The third type of new market is the environmental market. This is a theoretical construct, meaning that it only exists in theory. Major challenges lie ahead in the area of emission reduction. In view of the general consensus on this policy and because here too, as in all economic sectors, the polluter must pay, it is not at all certain that this can ever become a real market. It is possible to set reduction targets for each region. This is already being worked on. For the time being, however, the farmers are not willing to commit themselves to a collective obligation—one with an internal regulatory mechanism—to reach those targets. It is possible to make the burden of emission reduction a little lighter, especially in places where land will be released in the coming years. When some agrarian enterprises close down, the remaining farms can expand the size of their holdings. At a constant level of output, this would mean a lower intensity of land use—at least in principle. The economic restructuring in these areas creates the scope to lower the emission ceiling and to make enterprises more viable so that they can comply with the environmental requirements. Although it is certain that some farms will be terminated, it remains to be seen when that will happen, how many will close, and if closures will occur at the desired locations. This trend can

also be seen as an inevitable economic development that can promote the achievement of the environmental aims without a need for internal regulation.

This review of the way the notion of the market has been used in discussions of the environmental cooperative leads to the conclusion that new markets do not necessarily offer a good alternative for the threatened agricultural sector as a whole. At specific locations, a limited market can be a crucial factor in the chances for survival of innovative groups of farmers. The environmental cooperatives can explore these markets. In doing so, they can set the stage for a process of change in the way farmers operate, a change that might occur at a wider scale.

### *Function in the Renewal Policy*

In view of the information on the markets, it may also be concluded that many of the initiatives are actually the last signs of life of a sector that has not yet come to grips with the need for restructuring. Many environmental cooperatives are highly dependent on extra government funding. This creates a new financial dependency in a sector that can no longer stand on its own feet. To cultivate dependency is to shift the problems to the future. It should be questioned whether this valuation does justice to the integrity of the collaborative efforts being undertaken.

This brings us to another question: Is it realistic to assume that the sector can make a substantial contribution to the renewal of the countryside through self-management?

The problems associated with self-governance appear to arise mainly with respect to cleaning up pollution. The farmers are not yet inclined to commit themselves fully to collective obligations, especially when the reduction of the environmental load is at issue. The options also seem to be limited in areas that have major problems from the perspective of the environment. With regard to reducing emissions, very strict national targets have been imposed in response to the present level of contamination. The market can definitely not realize the generic environmental policy in those areas unless some form of agrarian restructuring also takes place. In view of the analysis presented above, however, it is fair to say that environmental cooperatives do give an innovative perspective on the multifaceted problem of renewal of the countryside. In the experience of the farmers, government policy on rural areas is devoid of incentive and is not of their own making. The pioneers in the area of environmental cooperatives do, however, work in the direction of the envisioned policy. The government sees a potential partner in the environmental cooperative, which can act as a sounding board because both sides speak the same language. Their collaboration can give greater legitimacy to govern-

ment policy and stimulate creativity on both sides. Environmental cooperatives can explore the options for alternative sources of income that are conducive to sustainable development. They can join forces with other actors to guide the impending—and imperative—process of change. In that way too, they would serve an important function.

### *Conclusions*

The environmental cooperatives that have been discussed in this article demonstrate both the potential and the limitations of self-governance as part of an ambitious new national planning vision. Environmental cooperatives are an outgrowth of discontent in the agrarian sector. Farmers form environmental cooperatives when they are dissatisfied with their own current situation but also when they are disillusioned about the unsustainable character of Dutch agriculture. The latter issue in particular turned the simmering discontent into an outburst of positive energy. A crucial element in that process is that opinions are formed from the bottom up with regard to how agriculture will be carried out in the future in another rural area. Whenever an innovative form of governance is put into practice, the ultimate results can only be assessed in the long term. Only when the balance is made up can the advantages be distinguished from the disadvantages.

The chance that environmental cooperatives will perform an essential function in the renewal of the countryside is determined by the following factors.

1. Because of the integral goals pursued by the environmental cooperatives—through which they intend to forge a link between agriculture and the ecological conditions at the local or regional level—they can prevent a fragmented approach to the issues, which is generally the result of poor coordination of diverse solutions to specific problems.
2. Because they are better poised than any other actor in the rural setting to rally support for renewal among the farmers, they can increase the chances that the policy goals will be implemented.
3. Because they are strongly oriented toward performance, they are in principle prepared to book concrete results, even in a relatively short period of time, that could sustain the momentum of the process of change.
4. Because environmental cooperatives draw on other actors as partners in consultation and negotiation in their activities, they can serve an important function by promoting wider collaborative ties.

At the same time, there are certain risks as well. The biggest risk is that the results will be inadequate in the short run. This could quickly undermine the support that has been generated throughout the network and

even in the cooperative's own constituency. A second risk lies in an insufficient degree of professionalism. There are various aspects to a professional approach. It means that farmers, who carve out their own model of the future, should have access to the knowledge and expertise they will need to reorient themselves—for instance, with respect to the management of nature and the landscape. At present, that basis is still being built up. They should also have an effective internal structure. Right now they lean heavily on volunteers. Finally, the legal framework warrants closer examination. A cooperative organization that manages public money will not only have to be courageous enough to accept responsibilities but must also be accountable for its actions. This implies not only an acceptance of monitoring and external auditing but also a willingness to submit to internal control and sanctions. With respect to the latter point, only the first steps have been taken.

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