19
Social Embedding of Environmentally Integrated Farming on a Regional Scale: A Case Study about Ecological Modernisation in Waterland (The Netherlands), a Target Area for EU Agri-Environmental Programs (regulation 2078/1992)

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Abstract

In this paper, Waterland in the Dutch Peat Meadow District is described as an exemplary case because of its many different Social Arrangements for Environmentally Integrated Farming. This rather marginal agricultural production area, with valuable landscape and nature features, shows a mixture of:

Different institutions that enable exchange to take place between environmentally friendly farmers and non-farmers who appreciate this because of the landscape and nature qualities that are connected to it;

The Top-Down 'Management Agreement Scheme' (EU-AEP regulation 2078/92) being based on collective demand faced with individual supply of environmental qualities by farmers;

The Bottom-Up 'Farmers Nature Organisation Waterland' operating at two institutional levels, firstly 'collective demand // collective supply' in fund raising among governments and secondly 'collective demand // individual supply' in concluding contracts about nature production with individual farmers;

The Conventional Market Institutions varying from 'Atomic Markets' (e.g. on farm retailing) to 'New Production Chains' (regional quality products);

Different geographical scales in which the exchange between farmers and non-farmers occurs taking into account that Top-Down Programs compared with both other institutions in Waterland are marked by a larger geographical scale;

Different degrees of government involvement in exchange processes and in this regard there is an interesting role for the Provincial Government as a facilitator of stronger connections between Waterland and the nearby urban population of Amsterdam;

Different motivations found with farmers about the management of Rural Amenities going from economic and strategic considerations to idealistic feelings about countryside stewardship, taking into account that the first local initiative was about Voluntary Bird Protection and that it had no direct economic dimension.

Bottom-up initiatives stimulate the development with farmers of a new social identity and new skills in nature production. Top-down initiatives -management agreements combined with structural measures- seem to be more effective in protecting specific site qualities in the

really long run, especially in relation to the stability of the peat soil. However, the bottom-up initiatives are rather new and their future scope can be enlarged.

Introduction

Ecological modernisation as a target for agri-environmental programs

This paper takes part in international research regarding the uptake of agri-environmental programs (AIR 3 CT94-1296). These programs from Brussels have been started in order to stimulate environmentally friendly behaviour by farmers. At the moment, there is a tendency away from generic top-down stimulation programs and instead attempts towards facilitating regional (bottom-up) initiatives by farmers and stakeholders of environmental qualities.

The goal of this facilitation can be described in terms of "ecological modernisation" (Frouws and Mol, 1997; Spaargaren et al, 1992) at a local level. According to ecological modernisation theorists, a kind of "reembedding" should take place to restore the balance between nature and modern society. In this view, ecological modernisation is a correction of, the "desembedding" which occurred in the past. This can be illustrated in the case of agriculture. The rise of industrial modernisation was marked by integration of farms in supra-regional production chains or agri-business complexes. These chains demand uniform production techniques in farming, independent of local production circumstances.

Ecological modernisation as a correction of industrial modernisation will be necessary for several reasons. Classical modernisation often only counted economic gain; it neglected the loss of "non-economic" values such as biodiversity and cultural landscapes. But even from a one-sided economic point of view this "desembedding" did not always make much sense. The so called environment often proved to be not really external to farming. Higher economic gains could be realised in the short run but in the long run "environmental" damage created high costs or diminishing yields (e.g. because of polluted soils). In addition to this, the old economic way of thinking mostly turned a blind eye to the importance of excellent environmental qualities as a possible economic resource (e.g. regional quality products, but also organic farming). Of course, there can be "non-economic" benefits from a "reembedding" as well, e.g. the strengthening of social identities on a local basis.

Ecological modernisation as a process can be labelled as institutional transformation. As a result of the transformation, "environmental" qualities are taken into account again, as an economic resource or as a value to be respected. This paper focuses on Waterland in the Netherlands, as a case study area with a diversity of emerging social arrangements for environmentally integrated farming. As a reference area without such emerging arrangements, attention is paid at Beemster a polder close to Waterland.

Optimisation in Study Areas

Optimisation of multiple site qualities as a function of ecological modernisation

In many parts of Europe there is alternation of less favoured and "optimal" agricultural production areas, e.g. the transition from marginal mountain areas to excellent soils in neighbouring plains. In the Dutch study area North of Amsterdam, the less favoured sub-area

is to be found at about sea level; the peat meadow district Waterland. In this peat district, it is not possible to grow crops other than permanent grass. Even then farmers meet many constraints, especially in high water zones, with a water table reaching grassroots. On the other hand, the more favourable agricultural production sub-area Beemster is located about four meters below sea level. Until 1622, it had been an inland-sea surrounded by the peat meadow district. Now, it is a clay polder (Droogmakerij) with its initial layout being rather optimal for current farming. The soil allows for general crop farming (potatoes, sugar beets, cereals and a fourth crop). However, most agricultural land is used in a rotational system in which periods of six years with grassland for dairy farming, alternates with one year for the growing of flower bulbs by forensic horticultural entrepreneurs (who pay high rents to dairy farmers).

The picture of an alternation of poor and rich rural areas is one-sided. Agricultural use value is only one of several possible site qualities. The other qualities in rural (agricultural) areas may be called environmental site qualities.

Often low agricultural land use value in a less favoured production area coincides with high environmental site qualities, e.g. high natural values (bio diversity) in mountain meadows. Land abandonment may be the main threat to the continuation of these cultural nature and landscape values. However, wider farm development, in which the high environmental qualities are used as economic resources or as reason for governmental cross-compliance programs, can afford additional incomes to farm families. This all applies to the peat meadow district of Waterland as well. The least favoured parts of this low country, the so called boat farming areas (vaargebieden), were even brought under the EU “mountain area regulation”(…), as a first tier in the management agreement scheme.

In more favoured agricultural production areas, environmental qualities will often be under high pressure of intensive farming practices. This can be seen in Beemster as well, e.g. the contamination of surface water by the use of chemicals in the growing of flower bulbs. Yet, Beemster can also be considered a sub area with high environmental qualities. These are especially landscape (not nature) qualities. It has been created as a man made landscape, initiated by rich Amsterdam merchants as an investment in agricultural production but also in home estates (buitens). Because of its cultural heritage, it has been protected by Dutch physical planning against sub-urbanisation during the last decades.

Optimisation of multiple site qualities can be seen as the main function of ecological modernisation at a regional level. The opinion about what is optimal will depend on what is known about factual relationships between site qualities and also on the value attached to these different qualities. In Waterland, the sustainability of the peat soil annex with its typical nature and landscape values, can be enhanced for the next centuries, by a collective decision (Water Board) to maintain a high water table. This however implies a reduction of the agricultural use value of the region. Many of the social arrangements in Waterland for wider farm development are based on a consensus between farmers and stakeholders of environmental qualities maintaining that such win-loss situations can be replaced by win-win solutions, especially if farmers become active as supporters of natural development on farm fields (see next section).

Beemster in this paper is presented as a nearby reference area for Waterland, with regard to the degree in which ecological modernisation took place. Unlike Waterland, Beemster is not

an experimental station for new social arrangements, but it is a region where wider rural development has been rejected by many farmers. Three years ago, a proposal for a voluntary re-allotment project was voted down by farmers, among other reasons because of the proposed natural development of eight hectares (out of 4,000 hectare) of farm land. On the other hand, among farmers there is strong support for the Beemster landscape, but they are reluctant to the intrusion of nature and in general to external influences in their characteristic polder.

Social Arrangements for Environmentally Integrated Farming in Waterland

Theoretical considerations

Environmentally integrated farming

The expression „environmentally integrated farming“ is used here in the sense of wider farm development. It comprises all actions of farmers directed at reducing environmental damage or otherwise at an improvement of environmental qualities. The economic consequences for the farmer range from increasing production costs (e.g. investment in manure disposal), to economically neutral (e.g. nature conservation as a hobby, but also compensation of additional costs by AEP schemes) finally an increase of income (e.g. regional quality products).

Study areas as a new common field

As a theoretical background, the classical situation “The Tragedy of the Commons” (Garret Hardin, 1968) can be mentioned. Imagine a green space with several actors having free access to this space. In such a situation friction may occur between, (1) maximising individual actors (micro level) and (2) optimal solutions at a level of the green space as a (common) greater good (Ridley, 1996). Economists will recognise the prisoners dilemma in collective action (Olson 1965).

Remember that our society has changed a lot since the time of common fields. In the classical model, only farmers were interested in common fields. They constituted a firm majority in society. Changes afterwards can be characterised by the key word “social differentiation”. People achieved many different positions (esp. occupations) and a range of specialised institutions entered onto the scene. In the (industrial) times of large specialised organisations, central (national) governments were specialised as a steward of the greater good. At the moment there is a tendency to bring this responsibility back to the regional level. New social arrangements should be developed which take into account the social diversity being much greater as compared with historical times and also greater if compared with the recent (industrial) past.

One of the modern developments is the division between production and consumption. This division is also visible in the opinion of environmental qualities like a wealth of nature and landscape beauty, in terms of public goods (Latacz-Lohmann, 1996, Hamsvoort, van der et al 1996). In this vision these “public goods” are enjoyed or consumed but on the other hand, actors who provide or maintain them often do not have the possibility to exclude free riders. In this view, social arrangements are needed which transform free markets into “quasi markets” encouraging consumers to pay the farmer as a producer of “environment”, or in the

other case imposing environmental obligations on farmers in order to achieve free consumption for visitors and stakeholders of the country side. This last road towards provision or maintenance of the public good is part of “property-rights regimes”. These regimes are institutions representing arrangements which people devise to control their use of the natural environment (Bromley 1989). For these arrangements Röling (1998) uses the expression “the soft side of land”. Social arrangements in the sense of soft systems (Checkland, 1981) are not stable institutions but are emergent properties; the preliminary result of interaction between people starting from different perspectives (see section 3.3). The primary function of these emergent social arrangements is not the optimisation of profits by producers and consumers, but sense making by people who are in the countryside as producers and consumers of site qualities at the same time.

Soft systems are in people’s minds, hard systems are facts of life. In this paper both levels of analysis are relevant. Expressions such as market institutions (e.g. production chains for regional quality products) can be considered as hard systems, which in the Waterland case are emergent properties as well. Negotiated perceptions about site qualities and sustainable land use are emergent soft systems.

Institutions for exchange between farmers and society

In Waterland many manifestations were found of an exchange relationship between farmers who (re)produce Rural Amenities (High Valued Environmental Site Qualities) and non-farmers who are consumers or stakeholders of these Amenities. The exchange relationships that were found could be place in the schematic overview below. The dimensions in this schematic overview are (a) with farmers, solitary supply versus collective supply and (b) with non-farmers, solitary demand verses collective demand. With regard to ‘collective demand’ the following sub-dimension was discerned (c) collective demand expressed by private groups versus collective demand expressed by governments.

Illustrations that were found in Waterland can be seen in the overview. It should be noted that the Farmers Nature Organisation is mentioned twice, namely in the overview-boxes 3-a and 4-b. This organisation has contracts and negotiations on two different levels. In fund raising with governments this organisation expresses a collective offer to realise Environmental Site Qualities on a regional level. In the concluding contracts with individual farmers this organisation represents the demand side of the market for Rural Amenities.

Overview 1 Markets[41] for Rural Amenities (esp. Valuable Landscapes and Nature) connected to farming

Characterisation of market institutions for Rural Amenities	Direct participation of government in market institution	
	No	Yes
Solitary supply and demand (free market model)	1 Atomic market On farm retailing or recreation (not integrated in a production/recreation chain) In town retailing by farmer , e.g. Farmers' Markets') Retailing by advertisement')	
Collective supply, solitary demand	2 Common offer done by farmers to public Central Booking Office for Farm Tourism Fine Food and Drink Trail')	
Solitary supply, Collective demand	3 Common order issued by group or government interested in Rural Amenities	
	3-a Nature Conservation Organisation sub-contracting environmental tasks to farmers Contracts between farmers and Farmers Nature Organisation	3-b Management Agreements Sub-contracting of environmental tasks to farmers by government, also by Watershed (NL)
Collective supply and demand (organised market model)	4 Bargaining between 'common order' (demand) and 'common offer' (supply)	
	4-a Production Chains for Waterland meat connecting Restaurant Chain for Fine Food	4-b. The Waterland Farmers Nature Organisation negotiating about subsidies that can be used to conclude contracts with farmers Sub-contracting of environmental tasks to the Farmers Organisation

') Mentioned for systematic reasons, not really important in Waterland or in an initial stage of development

[41] This is according to the definition of Tomlinson (1996) about "markets as institutions that enable exchange to take place"

Exchange relations and other mechanism to manage rural amenities

Institutions for exchange can be located between two other mechanism to develop or maintain Rural Amenities, namely (a) voluntary action by farmers and (b) obligations that are imposed by governmental environmental regulations or structural measures.

Next is an overview giving an impression of the most important arrangement for environmentally integrated farming that Waterland farmers are in touch with. These arrangements are ranked according to increasing freedom, or decreasing regulation, concerning the management of environmental qualities.

Overview 2 Arrangements, ranked according to decreasing governmental regulation

Arrangement	Most important specification
Structural measure	Collective decision (by Water Board) to maintain a high water table in order to prevent oxidation of peat soil.
Sub-contracting to farmers	Severe environmental constraints for farmers as renters on land owned by Nature Conservation Organisation; Positively formulated tasks (what should be done) for nature or landscape elements on land owned by a Water Board or Nature Conservation Organisation.
Market cross-compliance-1	Farmers who take part in a production chain for regional quality products or organic farming
(integration in chain)	PM: Chain for farm tourism -with central booking office- is not land based. A facilitator of new production chains is the Valuable Man Made Landscape (WCL) project, of the national and provincial government
Top-down cross-compliance	Management agreement between government and farmers: (negatively formulated, from which where farmers should abstain) Light agreement (Mountain Area Regulation) Middle agreement (recently closed) Strong agreement, e.g. with the obligation not to cut grass before the end of the nest season of meadow birds
Bottom-up cross-compliance	Contract for nature production by a farmer and for payment by the Farmers Nature Organisation, by which the level of payment is based on results, not on activities. (also subsidies by FNO for farmers investments in structural field/margins adjustments in favour of nature) (the contract prescribes a course in nature conservation to be followed by the farmer, and also bookkeeping of animal or plant species) A cross-compliance relationship is established also at a local level: between FNO as a fund raiser and public or private organisations which are fund providers (esp. provincial government)
Market cross-compliance-2	Regional quality products and tourism delivered directly by farmer to customers.
Voluntary environmental management	Farmers engagement in activities of Association for Voluntary Meadow Bird Protection, including free access to farm fields for volunteers to mark bird nests; Farmer's co-operation with supra-regional organisations for the management of small landscape elements by volunteers.

Dynamic interaction in networks

The evolution of social arrangements for environmentally integrated farming in Waterland can be understood with concepts from literature about network management (Glasbergen). This does not mean governments as stakeholders of common interests, always follow deliberately a policy of strategic intervention in local networks. Only in the last years in the Valuable Man Made Landscape (WCL) project has the province North Holland chosen to play a role as a facilitator and initiator of networks (e.g. new production chains). In other cases, the situation was more similar to a common field surrounded by stakeholders each with different strategic interests, actions and counter actions.

Important notions in a network management approach are:

- The perception by stakeholders of what can be achieved *without* negotiated co-operation: BATNA = Best Alternative to Negotiated Agreement;
- The perception about what can be achieved *with* negotiated co-operation;
- Redefinition of the situation from a BATNA in terms of win-lose solutions (each stakeholder fighting to be on the winners side) to the recognition of a lose-lose stalemate into the awareness that negotiated co-operation can be a road towards win-win solutions.

A successful redefinition of the situation will not always be achieved. Maybe the appliance of such an approach is linked to certain cultures. In societies which are deeply characterized by "the image of the limited good" (Foster) might this kind of approaches not work. This image implies that if there is a winner someone else must be a loser. There may be situational reasons for stalemates as well. Slangen (1996) shows that governments (as a stakeholders of public goods) and farmers as owners of the land have different strategic positions, and hidden information on both sides. On the other, hand the government in the network management approach, takes a relaxed attitude towards policy goals. It claims the role of a facilitating middleman between other parties.

Actual situation: frequency of arrangements in waterland

The next table about frequencies of arrangements is based on a survey that was done (in 1996) just before some new projects for wider farm development came into full operation. So the table gives an underestimation of the degree in which Waterland farmers are engaged in wider farm development. Yet the table shows large differences between Waterland and Beemster. Looking at the figures 69% of the Waterland farmers have parcels on which the maintenance of environmental qualities are embedded in external bonds, in Beemster this holds for 28% of the farmers.

Table 1. Percentages of farmers in Waterland and Beemster with external environmental bonds on at least one parcel

Environmental bonds			Region	
A	B	C	Waterland	Beemster
-	-	-	31	72
-	Membership	-	15	11
-	-	rented land	8	9
-	Membership	rented land	4	-
Management Agreement	-	-	20	4
Management Agreement	Membership	-	5	2
Management Agreement	-	rented land	14	2
Management Agreement	Membership	rented land	3	-
			100	100
			n= 113	54

A = Management Agreement between Farmer and Government (AEP regulation 2078/92)
B = Membership of Farmers Nature Organisation or other Environmental Organisation
C = Farmer rent land from environmental organisations, with constraints in favour of environmental qualities.
Source: Survey EU project Sustainable Land Use, additional questions in Dutch questionnaire

Farmers engagement in environmentally friendly activities

The next table mentions how many farmers in the survey reported that they had done some environmentally friendly activity in last five years. The difference between Waterland and Beemster is not as great as appears from Table 1. The main reasons for this small difference are:

- many farmers who has had a Management Agreement for many years do not consider themselves actively involved in nature conservation, and
- farmers who are members of the newly founded Farmers Nature Organisation do not always follow the compulsory course in nature conservation.

Table 2. Percentage of farmers who reported themselves actively involved in environmentally friendly (learning) activities

Wider Farm Development (WFD) Type	Activity type					All activities
	Educational course	Excursion/ demonstration	Extension meeting	Farm adjustment/experiment		
				All	Subsidised	
Waterland						
Nature conservation	19	14	14	3		29
Landscape management	6	4	5	2		10
Reducing inputs/outputs	6	8	3	-		11
Organic farming	3	8	3	3	-	10
Farm recreation	3	4	3	–		6
Regional quality product	4	2	-	-	-	5
All types of WFD	26	23	19	18	3	43
Beemster						
Nature conservation	9	5	2	2	-	11
Landscape management	-	5	13	-		15
Reducing inputs/outputs	5	15	7	-		19
Organic farming	2	9	-	-		10
Farm recreation	-	-	2	-		2
Regional quality product	-	-	-	-	-	-
All types of WFD	11	21	17	17	-	32

Source: Survey EU project Sustainable Land Use, additional questions in Dutch questionnaire

Waterland farmers are mainly concerned with nature conservation. Farmers in Beemster have a somewhat higher involvement in a clean environment (reducing inputs/outputs) and in a beautiful landscape.

It seems likely that Waterland at this moment (two years after the survey) would report a much higher involvement in nature, regional quality products and farm recreation than Table 2 shows. This is stimulated by the recent projects of wider farm development.

Cross-compliance as an incentive in these arrangements

Cross-compliance means that an actor is rewarded for activities in favour of environmental qualities or for abstaining from damaging actions. It implies the presence of a second party who is willing to pay financially or with favours, to a farmer for his environmentally integrated way of farming. Cross-compliance in a broad sense, is present in each of the arrangements mentioned above.

In the first case, (the structural measure of a high water table) there is mostly indirect compensation. In general, only Waterland farmers in high water zones have the possibility to conclude a management agreement. Most farmers in a "low" water zone (60 centimetre below grassroots) are outside the target zone for management agreements.

In other cases, farmers are paid directly for abstaining from environmentally damaging activities (top-down cross compliance) or for the achievement of nature results (bottom-up cross-compliance). In this last case, the Farmers Nature Organisation concludes cross-compliance contracts on two sides, (a) for natural production at the farm level with farmers and (b) for natural production at the regional level, with governments or public organisation which fund the organisation. There are also non-financial incentives to participating in the activities of the Farmers Nature Organisation. Farmers enjoy the new social identity, which is achieved by these country stewardship activities. These social rewards hold for the unpaid participation in the Association for Voluntary Meadow Bird Protection as well. Initiators of the Association (and of the Organisation as well) are well aware of nature conservation as an effective public relation instrument to promote Waterland as a friendly *agricultural* region.

In cross-compliance on a market basis, additional added value is realised by farmers who are involved in regional quality products, organic farming or in country side tourism.

Farmers who are in a sub-contracting relationship with Conservation Organisations being owners of many farm fields in Waterland, in most cases can find the satisfaction of cross-compliance in cost reduction. Most of the land is rented out free, because of the severe environmental constraints.

Dynamic approach: evolution of social arrangements in waterland

The conversion from "adversarial to collaborative interaction" (Glasbergen) in Waterland took place around the year 1983. The framework in which the interaction between farmers and environmental stakeholders took place was the planning procedure of several land reconstruction projects (Ministry of Agriculture) in Waterland. BATNA to environmental stakeholders was to maintain or to restore peat meadow *wet*land conditions in most parts of Waterland. This decision was already taken for some parts of Waterland. Farmers in this area (Waterland-West) lacked a realistic opportunity to vote against reconstruction plans. Especially in the most marginal parts of Waterland-West something should change to prevent complete agricultural marginality, and land abandonment. A compromise was found in a limited improvement of the agricultural use value while a large improvement of farm family incomes was achieved by the introduction of management agreements (in 1992 brought under EU regulation 2078/92).

In Waterland-East, the manoeuvring room of farmers was greater. The land use conditions, compared to Waterland-West, were better, especially in parts with a light clay cover on the peat soil. These farmers of Waterland-East did not like the idea of becoming dependent upon governmental income supplementation, and the government, felt the need to limit the area in which the expensive management agreements would be applied. This put the BATNA of *environmental* stakeholders for Waterland-East in a relatively weak position. Lowering water tables in land reconstruction, would stimulate agricultural intensification, in which case they would be on the lose-side. As an additional negative effect, volunteers in meadow bird protection could lose their free access to farm fields because of the controversial interaction with farmers. There was fear among farmers that controversial interaction with environmental stakeholders would frustrate the relatively agricultural minded land reconstruction in Waterland-East.

As an outcome of this stalemate in 1983 the Association for Voluntary Meadow Bird Protection was born. Members of this association are farmers and volunteers. The basic idea was that farmers, also on relatively intensive farms, could play an active role in meadow bird protection together with volunteers (who would detect and mark nests). The facilitator of this movement was an institute for participating agri-environmental research (CLM) from Utrecht. In the years after 1983 most farmers not only in Waterland-East but also in Waterland-West, became members of the Association. Many of them internalised bird-protection as a task for farmers. The association was also perceived as an important means of "public relations" for Waterland as an agricultural area.

Recent developments

The Association created the mental climate for the foundation of the Farmers Nature Organisation in 1995/96. The difference between this Organisation and the Association - which still exists- can be indicated with the word "professionalisation". There are written contracts between the Organisation and farmers in which environmental results and levels of payments are specified. These contracts (about 150 up to now) also mention the obligation to the farmer to follow a course in nature conservation. The way in which nature conservation results are achieved is not prescribed, it is based on faith in the professional competence of the farmer. This is the main difference in the management agreements between farmers and the government. These being prescriptive and "negative": the contracts specify which activities the farmer should abstain from. One other difference between these contracts and management agreements is the level of payments. These contracts can mostly give a maximum addition to the farmers' income of about 100 ECU a hectare compared to about 700 ECU a hectare in strong management agreements. The main incentive for farmers may not be in economic gain but in professional pride and social identity. The detection of bird nests is especially labour intensive and the financial compensation is relatively low, not based on prices in external labour markets. Bird protection by farmers is done during times which are not needed for agricultural production. Especially on the farms with many hectares, the assistance of volunteers for nest detection still is needed.

The Farmers Nature Organisation was born out of the need of farmers for "professionalisation" including additional income, and on the side of the provincial government out of the need to develop systems for locally based network management for environmental purposes. The financing by the provincial government is temporary. After five years, negotiations are needed again for subsidies, between the Organisation as a fundraiser, and different (public or private) partners. Currently, negotiations are going on about possible

delegation of governmental tasks to the Organisation with regard to management agreements, especially the formulation of tiers (packages) in contracts with farmers. There is also a proposal made by the Farmers Nature Organisation to take delegated responsibility for the administration of the regulation about so called Mineral Balances. This would imply the shift from Mineral Balances for many individual farms to one Mineral Balance for Waterland as a whole.

Future Perspectives for Ecological Embedding

Uncertainty, or a lack of institutionalisation in the current arrangements

Sustainable *land use* may ask for *sustainable social arrangements*. Several arrangements in Waterland are on a temporary basis. The Valuable Man Made Landscape (WCL) Project is temporary by definition. However, its purpose is to achieve *self-sustaining* wider rural development. The Farmers Nature Organisation can be considered an experiment since the future funding is not guaranteed.

Threats and opportunities for the different arrangements

In February 1998, a platform discussion was organised in Waterland about future threats and perspectives for the different social arrangements. This discussion was about the future role of institutions mentioned in foregoing overviews, and about the interaction between these institutions. As most important issues in the discussion appeared how environmental tasks for farmers can be defined and which mechanism for money transfer, related to these tasks, to farmers can be created and maintained. Participants from several institutions saw a key role for Farmers nature Organisation. For instance, the participant of the Water Board had ideas about sub-contracting of possible new task for his Board (management of eco-systems in water) to farmers. For other participants the public relations for Waterland done by the Farmers Nature Organisation was perceived as an important factor in the successful development of several projects for Wider Farm Development, especially for Regional Quality Products and Farm Tourism.

Routes as an opportunity

So-called „routes“ or ‘trails’ can be thought of as a way to achieve synergy between many different initiatives in a region like Waterland. This seems to be most relevant for cross-compliance on a market basis, e.g. Fine Food and Drink Routes such as in Yorkshire. These routes might be supported by public infrastructure (managed by a Board), for instance networks of recreational paths.

Integration in the (urban) social environment on a small geographical scale

Especially the Valuable Man Made Landscape (WCL) Project aims at closer ties with the nearby urban centres. There are one million possible clients nearby. These ties can be thought in terms of a stable relationship directly with the public. Routes mentioned already can be used for this, but the new central booking office for farm tourism is a possibility as well.

These ties can be thought of also on the level of contracts between organisations in Waterland and urban governments. This is important to organisations such as the Farmers Nature Organisation: especially in obtaining structural subsidies for management of the rural space. It can be important to market based cross-compliance programs as well. The Amsterdam Community Council for example, declared that at official receptions only beef with the label „environmentally friendly produced Waterland“ meat would be eaten.

Other possibilities for structural financing of the management of site qualities can be Board constructions. A Water Board has the right to put levies on all inhabitants of a particular region, which may include urban centres as well. This path would be followed if some further enlargement of Water Board tasks would be decided upon (especially with regard to field margins). Also, the proposed Comprehensive Board can be seen in this perspective.

Integration on a large geographical scale

Waterland is close to some busy routes of international tourism. One route comprises the Flower Bulb District, the city of Amsterdam and the wooden shoe town Volendam (in Waterland). Also, the Zaan Heritage with the Tsar Peter House is in Waterland. These routes do not enter the peat meadow district. It would be possible to have the boat farmed area with romantic villages like Jisp as a part of such a route. The problem is that mass tourism would destroy ecological qualities. The WCL policy at this moment is to encourage small-scale tourism for expensive market niches.

The management agreement at the moment is integrated in the social environment on a large geographic scale. The scheme is financed on a fifty/fifty basis by the national government and Brussels (AEP, regulation 2078/92). The bottom-up initiative Farmers Nature Organisation is in need for such integration as well.

Concluding Remarks

The emergent social embedding of wider farm development (sustainable agricultural land use) in this paper is analysed on a regional level. Attention was paid to interfaces between this regional level and the micro-level of individual. From the perspective of endogenous development the focus can be on what farmers want (Mentality Groups, van der Ploeg, 1996) or on what farmers do (farming systems) or on the interaction between both (farming styles, van der Ploeg 1993). In a dynamic approach on a micro level, the learning of new skills by farmers who start activities outside agricultural production would be important (Winter, 1997).

Also, attention was paid to the interface between the regional and the macro level of production chains and the political/social environment. In the introduction, this larger environment was mentioned as a force toward unsustainable farming practices in the past (see also Nooij, 1997). On the other hand, the society at the moment pushes farmers toward a less narrow approach to farming. Several Stakeholders at the regional level are backed by the (inter) national organisation to which they belong. The macro support for Wider farm Development however, is relatively small. The large food industries are not taking part in wider farm development, and AEP money from Brussels is only going to the management agreement scheme and some generic programs (without regional targeting).

The idea of quasi-markets that reward farmers for specific environmental achievements seems to fit very well in the philosophy behind the current proposals about policy reforms from Brussels. An important question will be how these quasi markets can be organised. Top-Down approaches in which governmental institutions are responsible for the quasi market (e.g. Management Agreements) represent one possibility. Waterland offers an opportunity to experiment with possibilities based on "conditioned self-steering".

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