ENVIRONMENT AND AGRICULTURE IN THE NETHERLANDS

A Socio-political Perspective

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Preface

This volume is a first result of the Anglo-French-Dutch research project on the 'Politics of the Environment and Rural Areas' [1]).
In April 1987 a workshop on the historical and institutional framework of environmental policy concerning the rural areas in Britain, France and the Netherlands signified the start of this trilateral project. The revised Dutch contributions to this April 1987 seminar are collected in this book. The collection reflects a rather unique combination of inter-universitary and interdisciplinary cooperation in the domain of environmental studies. Since the contributions to this volume form part of a comparative project, they are not only meant to inform Dutch readers; they should be equally worth reading to foreign researchers and policy makers interested in relations between agriculture and rural environment.

The *opening chapter* is intended to give some basic information of the Dutch style of policy making, as far as relevant for the subject of our research. It treats the state, its relations to the local levels of society and the way nature and environment are conceptualized in Dutch common sense and policy making; the chapter is rounded off by some speculations concerning the near future of environmental policy.

In the second chapter, *De Groot* argues that rural planning should not merely be based on materialistic and scientific (ecological) grounds, but should also be inspired by philosophical and cultural views that people hold concerning the relation of man and nature. The practical consequences of one such world view, in casu the view of man as a partner of nature, are elaborated, first in general terms, and then focussing on a particular area in the West of the Netherlands. Although De Groot points to social and politico-economic factors conditioning the realization of a like project, socio-economic and political constraints are deliberately put in parentheses.

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[1]) A brief description of the project as well as a list of participating researchers are included in the Annex.

These are taken up in the third chapter. In this essay, *Frouws* analyses the agricultural policy community and the environmental policy field as well as the interaction between these two. The way the hot issue of the manure surpluses is tackled politically serves to illustrate the precarious relation between agriculture and the environment.

The fourth chapter treats the creation and institutionalization of environmental policy in the Netherlands. In this contribution, *Glasbergen* also exposes socio-political constraints of environmental policy. He delineates the relationship between the development of state intervention and planning concepts on the one hand and the genesis of environmental policy on the other. It is especially in this chapter that the historical framework of Dutch environmental policy is described.

The last two chapters focus on problems related to agriculture that constitute burning questions in Dutch politics of the environment. *Bolsius* portrays the institutional setting and development of environmental legislation with respect to agricultural practices. Some significant dissimilarities between types of environmental legislation are revealed, depending among others on the sector of the economy it applies to, the maturity of the legislative process, and the distribution of administrative power. Finally, *Volker* dwells upon the environmental aspects of land development projects. They imply conflicts between societal actors, struggling for the allocation of (land) resources to different social interests, connected to the various functions of the rural environment. Once again the crucial role of the state and the dominance of the agricultural interests stand out clearly. In accentuating these politico-economic constraints Volker's analysis represents an addition to De Groot's inspirations.

Chapter 1

State, Society and Environment in the Netherlands

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1.1 State intervention and corporatism.

The use of the notions of state and civil society is not undisputed. State and society have come into existence in conjunction with one another. In class-divided societies there are large spheres of society which retain their independent character in spite of the rise of the state apparatus. However:

> "With the rise of the modern state, and its culmination in the nation-state, 'civil society' in this sense simply disappears. What is 'outside' the scope of the administrative reach of the state apparatus cannot be understood as institutions which remain unabsorbed by the state." (Giddens, 1985)

The state is enmeshed in the contradictions of capitalist society. The state's activities, within the economy and outside it, have continued to expand. Recent tendencies of a 'retracting government' don't detract to much from the factual omnipotence of the state. The would-be state withdrawal comes above all things to a societal rearrangement which means in the first place a mere shifting off of institutional and financial costs.

The managerial tasks of the state include a wide spectrum of non-economic activities. The term 'state intervention', which refers to the managerial activities of the state, is a 'misnomer' (Giddens, 1981), because it is derived from the classical political economy premisses concerning the separation of polity and economy. The omnipresence of the modern labyrinthian state (Stuurman, 1985) makes it impossible to treat the state as a distinctive social institution. The state is embedded in a network of policy communities (Cox et al, 1986b), which incorporate the key social actors influencing policy formation. What is meant by 'state' or 'civil society' depends primarily on concrete historical conditions. It is an analysis of the conjunction of state and society that is crucial.

The interpenetrating state-society relations are structured in accordance with specific patterns and rules. These are guiding and 'producing' the practices of social actors, being reproduced and transformed in social practice at the same time. *Corporatism* is conceived here as a concept to

theorize on this structure of state-society relations. The concept is frequently used in analyses of wage policy, managerial state activities, welfare politics and political strategies in the Netherlands (Keman et al., 1985; Akkermans & Nobelen, 1983; Fernhout, 1980). The modes of defining and applying the concept of corporatism vary widely, however. In this volume corporatism is considered as a middle-range theoretical concept, which refers to a particular structure of interest intermediation and policy formation. In this restricted sense use of the concept of corporatism may be limited to only one segment of society or the economy, in this case agriculture. Institutionalised cooperation between the state and representative groups in the policy making process is considered a defining characteristic of the corporatist structure (Panitch, 1980). Representative groups - gathered in 'corporative' organizations - are vested with powers to participate in policy formulation and to implement policy measures. The state profits by increased legitimacy and implementary capacity. The cooperating societal organizations gain influence on the preparation and implementation of policy, rendering themselves co-responsible. They secure the compliance of their members, 'disciplining' their constituency. Negotiation and implementation are both essential to the understanding of corporatism (Grant, 1985).

Corporatism can take on specific characteristics, like consensus-building by elites, the prevalence of a highly technocratic ideology, functioning in a state of relative isolation vis-à-vis the parliamentary process, etcetera, which all derive from the conjuncture of concrete, historical social practices.

1.2 Central government

In Dutch common language the use of the word state (staat) is significantly limited. It mostly occurs in compound words like 'staatsinrichting' (form of government) or 'staatsrecht' (constitutional law). The notion of state is identified with the formal juridical aspects of institutionalised authority. The term of state evokes ideas of a centralistic, bureaucratic, paternalistic apparatus, organised at the national level. In common (depoliticizing) parlance the state is called 'overheid'

(the authorities, government: a kind of magistrature, populated by prudent and wise men who take care of their 'subjects'; Stuurman, 1985). These magistrates are considered experts in the first place. In the process of state formation in the Netherlands regional autonomy and centrifugal tendencies have impeded the development of a central state apparatus for a long time (Verrips & Zwaan, 1979). Central policy only very gradually came into being except for the domains of defence and foreign policy. Local and regional functionaries enjoyed more prestige than their colleagues in The Hague. A strong, centralised government machinery, which rose 'above society', did not appear. An 'Ecole Nationale d'Administration', which formed a category of generalistic civil servants, has never been realised in the Netherlands. The Dutch state is the product of a close interaction between the administrative apparatus and particular sectors of society.

The process of state formation has resulted in the following characteristics of Dutch central Government bureaucracy (Daalder, 1985).
First, a relatively autonomous recrutement of civil servants: a systematic bias in class- or status belongingness is not discernible. The state organises the new 'middle-class' and is organised by it. The professional 'castes' identify themselves with the state as it ought to be: a rational organization, which regulates and administrates society in an efficient, planned way (Stuurman, 1985).

Secondly, great differences in staff characteristics of different departments; these can be imputed to the departmental articulation of particular societal claims and to the existence of liaisons between 'professional' or 'technical' departments and particular universities. The department of agriculture is a case in point.

Thirdly, the politics of accomodation: a culture of coordination and consultation, which has embedded Government in a network of advisory committees. The state apparatus is encircled by an 'iron ring' of technical and representative consultative councils (CRMH, 1984). The politics of accomodation are of relevance to the degree of departmental autonomy. In the process of interaction with the elites of interest groups and social movements, be it incorporated in consultatory institutions or not, state managers integrate parts of society. In the same process of integration, internal changes of the state apparatus itself are produced. These involve the growing of the state machinery in such a way that 'the

integration of the state apparatus per se becomes a problem' (Stuurman, 1985). Departmental autonomy is significantly reflected in departments having their 'own culture', which can be 'stamped' more or less by a particular societal constituency. High officials characteristically speak of 'the habits of this house', when they refer to specific institutional practices of their department. The culture and 'rules' of a department not only mean that the room for manoeuvre of a minister is limited. They imply, moreover, that interdepartmental cooperation can be severely hampered.

The real ministerial influence depends of course on time-space related conditions like the prevailing governmental coalition, relations with parliament, the composition of the administrative departmental elite, and the like.

One of these time-bounded conditions is the central role of the christian democrats in every governmental coalition since World War II, which stands out as a dominant feature of Dutch politics. Consequently, the process of consensus building in the cabinet council always sticks to the political centre, where the christian democrats are seated quite comfortably. The great importance of political compromises may be regarded a highly significant corollary of this constellation.
Parliamentary autonomy is rather restricted in the Dutch policy making process. A docile attitude of the parliamentary majority on which the government is based, generally prevails. The Second Chamber of parliament is a favourite breeding ground for ministers and state ministers. Concluding on the relations between government and parliament let us hear to political 'practice'. As a high-ranking official of the Ministry of Agriculture put it:

> "We have to take into account the wants of the Second Chamber. Something has to be left for them to decide upon; they should be able to gain some minor political successes. That's the way things work."

1.3 Central-local relations

In the Netherlands a comparatively great part of policy implementation is left to regional (provincial) and local (municipal) authorities. This general feature has worked out differently, however, in various domains

of policy. So, contradictory tendencies play a part in central-local relations. Municipal authorities can be vested with greater decision-making powers on the one side, while their room for manoeuvre is restricted by budgettary retrenchments on the other side. In case of non decision-making by central government, local or regional authorities can introduce environmental regulations on their own, being forced to retreat as soon as national legislation shows up. The nature of decentralised policy implementation varies widely too.

A large part of implementary capacity in relation to environmental policy, for example, is delegated to provincial authorities, regional water boards and purification boards and municipal authorities. Decentral agricultural policy implementation, however, is based on a range of departmental services and institutions, spread all over the country. (Only ten percent of the civil servants working for the Ministry of Agriculture and Fisheries is stationed at The Hague). Above all, implementing agricultural policy is rooted in the cooperation with the organized industry in a myriad of councils, statutory bodies, semi-public institutions and implementary organs on the national, provincial and regional level.

Central-local relations have to be conceived as power relations of central government, local authorities and interest organizations. This holds true even more in an era of so-called 'deregulation' and 'privatisation'. What is at stake then, is the power to achieve particular ends via the mobilising of allocative and authoritative resources. Rigid formal hierarchical lines of administration are counterbalanced by modes of complementary administration, which are fairly common in Dutch administrative practice (Derksen, 1985).

1.4 The concepts of Nature and Environment

Matters of environmental pollution have a long standing as a public issue in densely populated Holland. Middle Ages city authorities, for instance, already banned polluting activities outside the city walls. The first time that something arose that might be called a public *movement*, however, it concerned nature protection, not pollution. The turn of the 20th century witnessed the birth of several private nature protection associa-

tions, among which the now very large Association for the Conservation of Natural Monuments. The establishment and management of nature reserves was the basic strategy of this movement, which slowly gathered government support, broadened its public base by education activities and worked its way into the world of scientific research. This 'first wave' was at its height around 1970.

In the sixties a second wave rapidly gained strength, triggered off by Rachel Carson's book and strengthened by the Club of Rome's report. The issues adressed by this environmental movement were broader and more fundamental, as well as the answers it proposed. Pollution, human health and the depletion of physical resources joined the scene, alongside with the 'old' issue of nature protection. The first wave nature protectionists were heavily criticized because of their passive, government-following attitude (Tjallingii and Van der Veen, 1984).

The first and second waves are largely overlappping at present. This is reflected by the overlapping usage of the concepts of nature and environment in the Dutch context.

The formal meaning of 'nature' is: all spontaneous processes and things, i.e., everything not brought about by man's design. The formal meaning of 'environment' is: all that surrounds man. These concepts overlap only partially. Most of the human body and much of human psychology is natural but not environment; buildings are environment but not nature. Daily use in Dutch language has shifted away from these formal meanings in some essential ways, however.

Nature

Although one may say "Naturally I did so!" and thus refer to a spontaneous psychological process, the term nature as a noun (*the* nature, as the Dutch actually say) refers to spontaneous things outside the human body boundaries. If you ask the average Dutchman where nature is he may show you the wild corner of his garden, or point at a flight of migratory birds passing overhead or take you canoeing through polder ditches, swamps or rivers. He will not point at his dog or take you to the zoo. This shows that the formal notion of spontaneity is adhered to in practice. However, not *all* things spontaneous will be pointed at. Neither the

stars, the ozone layer, the shape of Australia nor single bacteria will be called nature, although they formally are. Nature, in daily language, denotes the spontaneous things *that we relate to*, because they are visible identities, living on our scale.

This indicates that Descartesian and positivist philosophy, in which nature is nothing but dead or machine-like matter that does not relate to us, never got a deep hold on the minds of common people. A long time before science, philosophy, the churches or politics responded, Dutch nature protection became a joint enterprise of lay people and a small fragment of the scientific community that had not been washed away by the philosophical mainstream, i.e., the *field* biologists.

Dutch 'ethno-philosophy' also indicates that the primarily American world view explicated by the Deep Ecology philosophy will have a long way to go in Dutch society. Nature as a Deep Ecology concept is an all-embracing process and a spiritual 'universe of meaning' that envelopes man's identity (ref. Chapter 3). Nature in Dutch ethno-philosophy, however, primarily refers to tangible, identifyable entities (individuals or systems).

Environment

Like the concept of nature, the concept of environment in daily language has shifted away from its formal meaning of 'all that surrounds man'. If you ask the average Dutchman where the environment is he will probably look vaguely embarrased. But no conceptual problem will arise if you ask what the environmental *problems* are; the list you get may be long or short, but everybody will agree that acidification, pollution, poisened soils, the loss of the tropical rain forest and dying lakes are what the environment is all about, - not because they are soils, forests or lakes, but because they are poisened, lost or dying, in other words, because they are components of problems.

Environmental science in the Netherlands follows this ethno-conceptualization. The environment is defined as the physical, living and non-living, parts of man's surroundings with which man has a mutual relation' (Udo de Haes, 1984). It is then explicated, in environmental science as well as in government documents (PIM, 1983), that the relations from the environment to society (or, as it is said, that what the environment 'means to' society) come in three types:

- relations to human *health and safety*
- relations to the other aspects of human well-being, i.e., the *use functions* of the environment (production functions, waste recycling function, cultural orientation function etc.)
- 'ethical relations', referring to the *intrinsic value* of the environment.

Udo de Haes (1984) then makes the jump from empirical to normative concepts (environmental quality, environmental problems), and only them defines environmental science. In theory as well as in practice, environmnetal science in the Netherlands is not a conglomerate of empirical-science disciplines dealing with 'surroundings' in one way or another, but a relatively small and compact, *normative-science* discipline dealing with analyses, explanations and solutions of environmental problems.

Conceptual distinction and overlap

It follows from the foregoing that parts of nature that are not components of environmental problems are not visualized as parts of the environment in daily language. A patch of wild plants happily growing in a forgotten backyard is no-problem nature, and hence simply nature. Other natural elements may have problems, for instance that rare pioneer species are pushed out by a rapid succession to forest, but these problems may have a more or less natural cause. This category of 'nature, not environment'is very small in practice, however. Almost all contemporary nature management problems are associated with recognized environmental problems (acidification, excess manure, landscape fragmentation, toxic lake sediments etcetera).

A second source of potential distinction between the daily language *connotations of nature and environment is historical. The first wave of* environmental consciousness focussed largely on nature as an intrinsic and aesthetical value, a 'target variable' that was mainly threatend by non-chemical 'source variables' such as land reclamation, urbanisation and drainage. The second wave focussed (besides physical resource depletion) primarily on chemical 'source variables', their backgrounds in society and the functional ('survival') value of the environment. Hence, the primary connotations were somewhat different:

- 'nature' was associated with non-chemical sources with impacts on intrinsic and aesthetical values
- 'environment' was associated with chemical sources with impacts on functional values.

This distinction has never been very sharp or deep and is almost completely blurred at present. This increased overlap has two reasons. First, because of the generally raised ecological consciousness, the 'survival value' of nature has become an almost magic password in common sense. Secondly and more substantially, many threats to nature's intrinsic value are nowadays of a chemical character, thus interlinking the two basic connotations of nature and environment, connecting them into a single problem complex.

In this way, the first and second waves of environmental consciousness have come to overlap and reinforce each other. On the continuous spectrum that has thus come into being, many ideological and practical distinctions are present, of course. Some of them may be traced back to their origins in the first or second environmental waves, some of them to the social positions of discussion participants, and some of them are of a largely new order. This chapter concludes with an exploration of something largely new.

1.5 A third wave in the making?

In comparison to its massive public suppport the environmental movement has always been surprisingly weak on the political front. Two major reasons may be discerned behind this power gap.

First, the environmental issue has long been viewed as something *soft*, i.e., something outside the hard-core issues of basic social needs and the growth and distribution of material welfare. Secondly, the environmental issue has always been something *diffuse*, lacking an identifyable power base and a clear-cut, unifying conceptual 'paradigm'.

The lack of a unifying paradigm may be illstrated by the topic of 'integration', one of the major problems of government in this age, as stated earlier in this chapter. It had been understood at an early stage that environmental issues were interconnected, as well as connected to a large number of existing policy fields. As a result, everybody started integrating. The problem was, however, that integration took place along so many dimensions that the dimensions themselves became entangled. For instance, one may integrate environmental issues according to the sectors (or 'target groups') in society that cause them. One may also integrate according to environmental compartment categories such as water/soil/air. One may then say, however, that substances travel from one compartment to the other, and seek integration on a substance-by-substance basis. Then, however, one may answer that water and soil are ecosystems and hence more than assemblies of chemical factors, reinstating the classification by compartments. One may also integrate according to the type of impact variables (human health/material functions/cultural functions/intrinsic values). One may also integrate on a problem-by-problem basis, defining broad systems of interconnections between source and impact variables (acidification / fragmentation / dessication etc.). One may also say, however, that true integration can only take place if one takes into account all processes working in a region, and hence integrate on a region-by-region basis. All these classifications result in logically consistent integrations, and all of them (and more) have been applied and established in the Dutch administration structure, spread out over four ministries. The final result, of course, is not overwhelmingly integrated; one dominating concept is needed in order to integrate the integrations.

The year 1988 has witnessed a possible breakthrough on both the fronts of softness and diffuseness. The report 'Zorgen voor morgen' ('Caring for tomorrow'; Langeweg, 1988), that lays the basis for the overall government strategy in the coming decennium, has adopted the problem concept as the dominant meta-principle for integration and classification, supported by a secondary scale-of-problem classification. The 1988 Christmas Message of the Dutch queen, completely devoted to the environment, mirrors the problem approach; the introductory remarks paint the environmental issue by a list of environmental problems. This development will undoubtedly lay a basis for a more consistent policy formulation and

cooperation between government agencies. Problems are the basic entities that the environment 'is all about'. It is fortunate that this notion links up directly with public 'ethno-philosophy', as we have seen in the previous section. The choice for the problem approach will conceptually facilitate environmental policy to strenghten its roots in society.

'Zorgen voor morgen' is not only remarkable for how things are said, but also for what is said by whom. It is the first major attempt by civil servants (echoed by the Queen) not to verbally minimise problems, but to convey a clear message that the environment has become a hard issue of society, both in immediate terms as well as in terms of our responsibility for the survival of nature and future generations. We live on an unsustainable footing, it is said; the environmental problems 'undermine our society'. In a way, this is nothing new. The environmental movement has said hardly anything else for two decades. New, however, is the scientific documentation that goes with the message, and especially new is *who* says it. A substantial bloc of the administration, one of the most substantial sources of power in Dutch society, seems to have landslided into a new position. It will be interesting to see if this may grow into a third, 'ruling class wave' of environmental consciousness.

As for the struggle over the environment in the rural areas, it is clear that the corporate 'green front' of short-term, materialistic agricultural interests will have to deal with an adversary much stronger than envisaged only a few years ago.

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Chapter 2

Metaphysics for Rural Policy: The Partnership View of Man and Nature applied to the Western Dutch Lowlands

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2.1 Introduction

Anyone who takes a look at the process of policy making concerning the environment in the rural areas will notice that discussion partipants often refer to what they see as the proper position of nature in rural activities and the rural landscape. These opinions have often been analyzed in their more or less literal form, against the background of the participants' particular place in power configurations.

In this chapter, views concerning the relationship between man and nature will be approached on a 'deeper', more philosophical level. It is assumed that participants' arguments and actions are, at least partly, the 'superficial' surfacings of more abstract and general views concerning the basic structure of reality, that is, the world views, or *metaphysics*, that people apply to organise their daily life and political action.

Some sociologists will hold that this cultural dimension of policy making is a mere extension of the 'real', materialistic positions of policy making participants. Other sociologists will maintain that cultural contestation and development are not completely conditioned by interest group configurations. Be this as it may, a rural analysis can only be comprehensive if the cultural dimension is intertwined with the sociological and the economic. Some exploratory intertwining will be undertaken in Section 2.3 of this chapter, but on the whole the cultural dimension will be kept 'pure', in order to have it develop its own strength, and see what it has to say.

World views are applied by people as their most basic source of knowledge and values. Our methaphysics, as philosophers put it, organise our perceptions (the 'empirical order') as well as the moral order we recognize. They are the basis for *coherency* of action in the 'superficial', concrete world. This holds for organisations too. Government agencies involved in rural area planning need not only a sufficient budget, but also a *general*, and yet *operational*, view concerning the proper relation between man and nature (1).

With this in mind, this paper articulates and explores views not only applicable to specific landscapes or specific uses of the rural areas, but general enough to be a source of inspiration for the whole complex of relations between the city and its surroundings, the farmer and his environment, the recreationist and his landscape, the civil engineer and is water management plan, and so on.
Section 2.2 of this paper will enumerate four of such views concerning the relation between man and nature, drawn from the most general and fundamental sources available: current environmental philosophy and Christian views. Links with rural policy actors in Dutch society will be explored in *Section 2.3*.

A philosophical treatise of world views easily runs the risk of getting stuck on the purely theoretical level, leaving it to the reader to seek a relevance for this own problem situation. Practice shows that it is often very difficult to establish this link between cultural inspiration and practical action. Bridging the 'application gap' has in fact been my main motivation for writing this paper. Building the bridge will be done in three steps. In *Section 2.4*, one of the four views is selected and its planning consequences will be elaborated on a general level. This serves as the abutment on the philosophical side of the gap. In *Section 2.5*, we will switch our attention briefly to building the abutment on the empirical side of the gap. The rural areas of the western Dutch lowlands are chosen for this purpose. Finally, the bridge will be built in *Section 2.6*.

Of course, it is not my opinion that rural area planning should be guided by world views *only*. Knowledge about non-cultural facts and values, e.g., farmers' incomes, ecological processes, recreation demand, institutional structures and the social contraints to policy implementation should be applied in the planning process as well. In this respect, the other contributions of this volume provide much of the necessary information.

2.2 Four general views of the relation between man and nature

The rural areas, being intermediary between the city and the wilderness, are the meeting ground of man and nature. Therefore, world views for rural planning should be views of the relation between man and nature. In this section, four general views of this relation will be briefly characterized. Their sequence follows the degree of "eco-centrism" they imply. The descriptions make use of conceptual seperation of the world in three levels: the material things, the cultural level and the transcendent. Man resides on both the material and the cultural level. Normal things exist on the material level only, which is to say that they do not have a meaning for themselves. The transcendent is what exists outside our world of experiences. The transcendent may be called God, the Tao or, as some theologists and environmental philosophers put it, the "divine process of living".

It may be noted that many relations between man and nature lie on the material level; material man enjoys and protects nature's production functions, nature's capacity to deal with organic waste, nature's function as a gene pool for future use, and so on. Some functions run more "vertically"; an example is what in the Netherlands is called the information functions of nature, e.g., the 'orientation function' through which man, in his cultural aspects, uses (material) nature to define the historical and spatial place he lives in.

Given this general picture, the following general views of the relation between man and nature may be defined.

A. Man as nature's dominator

As Passmore (2) has pointed out, this view has gained the upper hand in Western, Christian culture as a confluence of the two main currents in Judean and Greec (stoic) thought; modern science (Bacon, Descartes) became its secular counterpart. An 'enlightened' version of man's kingship usually predominates nowadays. Conservation of resources is then

pursued in view of the needs of future generations. Nature's value however, remains purely instrumental.

B. Man as nature's steward

The image of stewardship, nowadays strongly expressed by the Protestant churches and their World Council is seen by Passmore as the revival of Greec and Judean undercurrents, a strain of which has remained present in Western culture. In the stewardship view, man, being created after God's image and having the mission to rule the world and multiply, remains at his superior position, but God does not only rejoice in man, but cares for the whole of His creation. This gives to nature, although remaining a material entity, a value independent of the value of man. The notion of stewardship has a secular version which will be touched upon later.

C. Man and nature as partners

The image of partnership has its modern roots in the Romantic movement and philosophy (e.g., Fichte). In this view, man and nature are involved in a dynamic process of interaction and mutual unfolding. This voluntaristic relationship is essentially horizontal, on both the material and cultural level. Nature, as it were, comes 'alongside' with man. This especially concerns relatively concrete, 'individualisable' natural entities, such as animals and ecosystems. When Franciscus of Assisi speaks about the sun, the sun is not only something that gives warmth (view A), and not only a material co-created value in itself (view B), but my brother Sun, who cannot be dominated but yet adressed.

D. Man as participant in Nature

In the previous view, nature was seen as a complex of relatively concrete, but meaningful entities by man's side. In the participation perspective Nature is a universe of meaning that envelopes man, also in his cultural identity and consciousness. A sudden sense of being taken up in the one-ness of nature, of being part of a mysterious process of living, is known by many people as a peak experience. In the participation perspective, this notion that one belongs to nature is part of the

essence of being human. From the participation perspective many links run to modern process theology and ancient Eastern philosophy and religion; furthermore, it is the core of what is called Deep Ecology in the United States, visible in journals like Environmental Ethics.

2.3 The four views in (Dutch) society

In this section, which is based upon personal observations rather than systematic research, it will be briefly explored what social units are "carriers" of the respective world views. Much of what will be said may have a general validity. It should be borne in mind, however, that the author is truly familiar with the Dutch situation only. It is also proper to realize that the descriptions of the previous section are very simplified. Views that people and institutes employ in practice are less explicit, and often of a richer, more subtle, mixed or intermediairy character. Moreover, it may be noted that people often draw their inspiration from and in fact act according to one view, but verbally legitimize their action in term of a view that is more acceptable or advantageous in their social context.

Actors with the view of Man as nature's dominator

The most interesting aspect of the view that man is simply nature's (rightful) dominator is that it does not seem culturally interesting anymore in Dutch rural planning. In the seventies, there has been an official attempt to describe the objectives of environmental policy in purely utilistic-ecological terms (3), but this idea never got hold of the policy (nor, for that matter, of the people, considering the massive selling of nature books and 240,000 membership of the Association for Preservation of Natural Monuments).

At this point, however, we should bear in mind that many things happen in the rural areas that are not within the reach of planning processes. One of the components of what we usually call 'autonomous development' (by lack of collective resistance) is the competition-driven machine of research, development and selling of 'modernisation' and intensification.

This machine needs a wide-spread cultural acceptance of the view of man as nature's dominator and manipulator as a basis for growth and profits.

The farmers are in a complex position. Materialistically speaking, they normally will increase their income if they manipulate nature in a purely utilistic, 'dominator' perspective. Many of them, driven into intensive pig breeding for survival reasons, simply have to act in this way, and attitudes often follow behaviour, social psychologists have shown. Research by Volker (in prep.) also brings to light a typical farmers' image of the neat, subdued agricultural landscape, in which everything is in a place ordained by man. At the other hand, non-utilistic attitudes towards nature are also very much alive in the farmers world, associated with the self-image of the farmer as a craftsman, 'carving' his product out of living materials he does not simply subdue, but responds to. Therefore, we meet the farmer also in the next pages.

Actors with the view of Man as nature's steward

In the stewardship view, nature is only a materialistic entity, but one with a "double value": a utilistic value for man as well as a value independent of man. In the secular version of stewardship, the latter value is not derived from nature's relation to God, but it becomes truly a value in itself, an intrinsic value. This secular version dominates in the environmental policy papers. (In normal Dutch political and planning discourses, references to God are taboo, however strong the influence of the churches and Christian parties may be).

The central general document in Dutch environmental policy is the 'Environmental Policy Integration Plan' (4), published in 1983. There it reads that environmental policy is undertaken "in view of human health and the other aspects of human welfare, *but also out of respect for the environment as a value in itself.*"

In a way, this is a revolutionary statement. Up untill 1983, the stewardship view had been visible in the government *acts*, e.g., the nature preservation policy, but these acts had always been legitimated in utilistic terms ("nature preservation is self-preservation", "diversity is stabili-

ty" etc.) or under a quasi-scientific cover ("ecological function", "ecological interests" etc.). In the 1983 statement, the stewardship notion was daringly proclaimed: nature is not only a means, but also an aim, a value in inself. The role of the churches in this process has already been touched upon in the previous chapter. The Dutch nature preservation movement, active since the beginning of the century (5), has long been the only carrier of the stewardship notion, and is probably still the stronger and more authentic of the two.

The view of stewardship slowly seems to take hold of the farmers associations, especially in cases where the destructive capacity of 'modern' is inescapably clear. Concerning the contribution of livestock farming to acid rain in the Netherlands, the chairman of the Christian Farmers Union recently stated: "We are ready to take our responsibility as stewards of the rural environment." (Of course, being a good union man, he quickly added that other acid rain makers should take their responsibility too, but that does not concern us here.) On the individual level, dairy farmers in the grassland areas have long standing tradition of actively protecting the meadow birds breeding on their lands. They often do this in co-operation with groups of local bird protection volunteers. In some instances, farmers have intensified this co-operation in order to escape from state interference (for which they would have been financially compensated!).

As a professional group, philosophers have not played any part in the cultural shift towards stewardship. A recent discussion (6) shows that environmental philosophers, a group only recently established in the Netherlands, still must go to great length to make the very concept of intrinsic value of nature acceptable in general philosophy, a discipline more anthropocentric than people. Not the philosopher but the natural scientist has been the historical 'articulator' of stewardship. (In the next paragraphs, we will meet the scientist's cultural counterpart, the engineer.)

Actors with the view of Man as nature's partner

Being a delta, the Netherlands exist by virtue of the rivers and the sea. At the same time the country has a record of a millenium of collective struggle against the water, culminating recently in the finishing of the Delta Plan. Countless references in poems, novels, modern myths, heraldic devices and the like show that water, in all its manifestations ranging from sea, large lakes, big rivers to the intricate polder water system, has always held a central position in the collective Dutch world view. In our days, the (interconnected) management of water quantity and water quality is still a vital part of Dutch environmental policy as a whole.

The central document of Dutch water policy is "Omgaan met water" (7), from 1985. The dictionary says that "omgaan met" encompasses two meanings:

- to handle, to deal with, to manage
- to be companions with.

This indicates that the deep involvement with water is still present; Dutch do not only "deal with" water, but also have a cultural relationship with it. Now that the Dutch have won their battle against water, the quality of this relationship seems to have shifted from an involvement-in-struggle towards an involvement-in-companionship: nature as man's partner.

This indication is affirmed in the text of "Omgaan met water". For instance, it reads that the central issue is:

> "..... working together with nature. (...) We should not only use our policy instruments for passive protection [of nature], but use them actively and creatively (...). Key words in this are: differentiation, flexibility of tuning in [to man's and nature's changing needs], harmony and integration."

It is interesting that this jump from world view A to world view C has been made in Dutch water policy bypassing the stewardship notion (B). This might be caused by the fact the Dutch water policy is formulated by (civil) engineers, contrary to environmental policy in general, where natural scientists predominate. Stewardship is basically a notion of

separation and reservedness: man tending God's garden or, in the secular version, man protecting an intrinsic value. This complies well with the world view of the natural scientist, characterized by the separation between subject and object. The scientist *looks at* nature. The engineer's education goes in an other direction. He is taught to *do something with* nature: to "mix" his natural object with human goals, and make something valuable out of this. If he lets go of the wish to dominate nature, he is predestined for the view of partnership.

Momentarily, the partnership notion is spreading through the intellectual elite of the nature preservation agencies and associations. Not nature protection but *nature development* is the elite key word nowadays, linked up with research for the design of "ecological infrastructure", rehabilitation of ecosystems and the like. Given its relations with the world view of Romantic philosophy, the penetration of the partnership notion will probably prove not to be a superficial fashion. A trend towards the partnership view may be enhanced by the Christian element in our culture, because of its links with liberation theology (voluntarism; the immanence of God).

'Biological' or 'ecological' farming makes up a relatively isolated patch in the landscape of Dutch agriculture. In some respects, this type of agriculture might be regarded as only a more prudent and enlightened expression of man as nature's dominator. Taking a closer look at what biological farmers think and do might reveal, however, that elements of the partnership view are present as well.

Concerning the way in which the partnership view may be present in the normal (non-'biological') farmers world, the following incident may be worthy of note. It concerns a recent television programme about genetic engineering of dairy animals and artificial growth hormones. Amongst the commercial salesmen preaching the universal blessing of this most advanced branch of dominance over nature, the university researcher trying to legitimate that he could not even disclose the name of the firm that paid him (illustrating the level to which universities may sink), and amongst the ethicians vaguely mumbling about the many-sidedness of this new technique, there was one who said no. He was a member of the Young Farmers Association. He said: "Of course I want good animals. But I want

a breeding scheme in which can see the animals individually, and then choose which animals I bring together." Filmed while he feeded his cattle by hand in a semi-modern stable, he proceeded: "This is the way I want it. I do not want genetically manipulated cows."

Actors with the view of Man as a participant in nature

As stated previously, many of us share some notion of being taken up in a meaningful universe. As such, the general function of the participant perspective may be to add depth and weight to the values inherent in the stewardship and partnership views.

To a certain degree, bio-dynamic agriculture, characterized by its attempt to respond to the cosmic order, might be regarded as a more specific expression of the participant view. But on the whole, there will not be many people able to make the participant image their sole guide-line for behaviour. Buddhist monks may do so, but, as Westerners would say, they do not behave much. This makes it all the more important that environmental philosophers, as the "Deep Ecologists" do, try to articulate and deepen the participant perspective, not as an exotic way of fullfillment, but as a significant additional source of inspiration for action in the Western World.

2.4 The planning consequences of partnership

As stated in the Introduction, it is not only the purpose of this paper to show which general views of the relation between man and nature exist and where they are located in (Dutch) society, but also to show that these views can be used as a basis for a 'cultural input' in the planning process concerning the rural environment, complementary to the 'materialistic input'. This section is the first step. The world view of partnership will be expounded, operationalizing it especially in the value commitment it implies. The partnership view has been chosen because it is the lesser known, but also the more inspiring of the two views the Dutch debate pivots around momentarily (B and C). It is mixed freely, and maybe somewhat implicitly, with the participation perspective.

The view of man as nature's dominator implies only one intrinsic value, that of man; the value of nature is only instrumental. In the view of man as nature's steward it becomes acknowledged that nature also has an intrinsic, independent value. The view that man and nature are partners implies a third intrinsic value. This key difference with the stewardship view is discovered as follows.

Most of us are in some way "life partner" of one or more other people, e.g., in a marriage. Hence, most of us will be familiar with the following scene. One partner, looking slightly troubled, may say to the other: "I am doing fine, and so do you, as far as I can judge. But, may dear, don't you think we should take a look at our *relation?* We hardly seem to *meet* anymore, and when we do, we quarrel."
This shows that in a partnership not only value is ascribed to the well-being of partner A and of partner B, but also, independent of their separate well-being, to their *relation:* partners are people who *meet,* and work together in harmony. Restating this in terms of man and nature, partnership can be said to imply:

- an intrinsic value of man
- an intrinsic value of nature
- and an intrinsic value of their relation as such.

Concerning the desired qualities of the relation between man and nature, we may turn again to the inter-human analogue. The key qualities, as the example shows, are of two kinds:
(1) *Involvement.* A partnership relation is an involved relation; not something detached ("thinking often about each other"), but a relation of working together, discussion, interplay and growth.
(2) *Non-dominance.* In a partnership relation, the responses of the stronger partner have to be attuned to the 'communicative needs' of the weaker (e.g., nature). In dealing with his child, a father uses much softer, more attuned means of communication than with his buddy. Here, we meet the old ethical adagium of prudentia. The quoted part of document "Omgaan met Water" reflects these two principles, in words like respectively:

- working together; integration; creativity;
- tuning in; flexibility; harmony.

It makes a gradual, but fundamental difference if rural planning is undertaken from the stewardship perspective or from the partnership notion, i.e., a value set to which the above criteria are added. Below, we will explore examples. The first item does not yet concern the relationship aspect, but concentrates on the concept of nature as such.

The re-establishment of spontaneity

In the stewardship perspective, nature is primarily defined as a relatively static entity, i.e., God's garden. The partnership view is more voluntaristic in its overall character. Consequently, this volunmtarism goes in out over the conceptualization of nature itself, adding a teleological flavour to it. Ecosystems are not only seen as intricate, valuable structures; they are also seen as processes, systems striving to realize their potentials.

Because of this, the partnership view does not only put value on pattern variables like the diversity of rare species or the completeness of food web structures, but also on the completeness, and especially, the *naturalness of ecosystem processes*. If ecosystems may enfold in freedom, if populations may maintain themselves without fences, hence, if processes are natural, some reduction in "pattern values" may eventually be accepted. It is not only the pattern result of spontaneous processes that counts, but also spontaneity as such. "Process-oriented nature management" is the term used for this in the Netherlands.

The new emphasis on spontanety may go as far as a recent and much acclaimed proposal to give some freedom back to the Dutch lowland rivers, by means of removing their summer dikes (8), - quite an event in Dutch culture.

The re-establishment of design

In the stewardship view, the focus is on an intrincic value that is, detached from man. As far as design of human activities comes into play, it is a design of protective measures and measures of nature management that may enhance natural values present in an area. The partnership view has an extended value commitment; not only nature as such, but also man's

relation with it is 'value-loaded'. A relation is not something that is, but something that must be made between partners. The partnership attitude implies a much greater creative involvement i.e., man's *cultural* "omgaan met" nature.

In the Netherlands, this shift is not restricted to the water enigineers, as stated earlier. Both in ecological research and physical planning science ("planology" as the Dutch call it) new trends emphasize the design attitude. This should, however, not be confused with the classical "landscape design", that focuses not on the ecological and relational landscape content, but on the visual form of the landscape, still too often proposing a row of polars alongside every wound inflicted cheerily on the lowlands. It should also be borne in mind that design in the partnership perspective is quite different (and more complex) than design based on a view of dominance, e.g., the so-called "functional" new landscape.

Relations as an aim, not only a means

Imagine a group of children, playing in the tall vegetation of weeds and willows, shot up in a "lost corner" of a new suburb. In the stewardship view, there is nothing valuable present: no rare species, no high species diversity, no complete, balanced ecosystem. In the partnership view, one will agree that this situation is certainly not the "top unfolding" of nature; yet, there are values present. First, there is spontaneity; as such, this vegetation is far preferable above a city park where every plant is at its 'proper' place. Secondly, there is a valuable relation between man and nature. There is involvement in the intense contact between the children and their ecosystem, and this involvement goes without dominance. As the true Romantic would say: the rough pioneer ecosystem does not suffer but lives all the better when some secret paths, dug-outs and fire places are added to its dynamics. (But note that the same Romantic would not let the kids be turned loose on a fragile, arid ecosystem in the dunes.)

The same principle can be applied to an important relation between man and nature in the polder landscape: that between the farmer and the meadow bird. In the stewardship view, it is the number of meadow birds

that counts as the aim of nature protection. If these numbers are protected by establishing reserves and having these managed by a government agency, there is nothing wrong with that. If the birds are protected by having the farmers manage the reserve, e.g., by regulating the date they start mowing the grass, there is nothing wrong with that either. The farmers' doings are only instrumental for the meadow bird objective.

From the partnership perspective, the analysis and resulting policy are different. Firstly, there is not only something wrong with the current meadow bird numbers, but also with the *farmer-bird-relations*: meadow bird numbers are not declining by some external cause, but because modern agriculture dominates the ecosystem to such an extent that no space for the birds is left. At the other hand, however, the government agency's management is not spontaneous and not involved, but artificial and mechanical, without a daily contact. A partnership policy for the meadow birds problem is directed at re-establishing a non-dominating farmer-bird-relation with the highest possible degree of spontaneity (voluntariness), e.g., by introducing appropriate technology and social and financial incentives. This is not only instrumental but also an independent objective, for which a smaller number of resulting meadow birds may eventually be accepted.

Partnership and recreation

In the stewardship view on recreation, nature is primarily something to *be enjoyed*, in a relatively detached and aesthetical way. The partnership view on recreation emphasises nature as primarily something to *be involved in*. Hence, climbing a tree may be a valuable activity within the partnership perspective, but to drive your car to the beauty spot in the middle of a national park to look at the splendid view and feed the bears certainly is not. A view has to be climbed up to, and bears are not to be caught in the subtle web of dominance we cast over our pets (9). Underneath some general guidelines for recreation are specified for three types of areas.

In general terms, 'partnership guidelines' for recreation in the *national parks and other natural areas* are as follows. First, contacts between man and nature should be as frequent as possible. This implies that we want

as many people as possible in the natural areas. Secondly and more importantly, recreationers' relations with nature should be as intensive, involved and spontaneous as possible, but at the same time non-dominating. Hence, we want cars nor fences, roads nor prefabricated shelters, but we want as many people as possible to be allowed (ideally) to hike and camp freely, finding their way (or become lost) without sign posts, participating in nature's splendors and dangers as well. Access to these areas should preferably be restricted by non-regulatory means. Making no roads may be enough for large areas. Smaller areas may be surrounded by a rural buffer zone in which only agricultural motorized traffic is allowed.

As for *recreation in the rural areas*, the same type of guidelines apply. In short, they lead to:

- a non-interfering contact between recreation and farming (direct selling at the farms, mini-campings at the farms, stimulation of volunteers landscape maintenance etc.)
- non-dominating and involved types of transport: large areas with motorized traffic by residents only (in the Netherlands, you can hire a bike anywhere).

At the other side of the scale of naturalness lie the *cities and suburbs*. These, and not their surrounding rural areas, should provide for the type of nature we may use for our more nature-dominating forms of recreation. Even in the relatively densely built-up Dutch towns it is amazing how much space is actually left unused. Budgets now spent on "developing" rural areas close to the cities into the large scale trivialities of recreation areas could be put to better use in upgrading the city parks and redesigning the suburbs' empty spaces, filling them with a tough and interesting type of nature that can be functional for many recreational needs (10). This also concerns the suburban water systems, for which many potentials for re-design exist (11). Nature-close-to-home has a special relevance in the partnership view. Daily interactions with simple natural elements (e.g., children fish-netting) are not only instrumental for awareness-building that may be a cultural basis for 'real' nature protection, but are valuable as such.

Partnership and agriculture

Because agriculture is one of most intense types of interactions between man and nature, it carries all possibilities for a very high, but also a very low level of valuability in the partnership view. Dutch agriculture still holds many potentials for development towards a more balanced, partnership-like relation with nature, coupled to an extensified land use. This is especially true concerning the grassland polders, because grazing is a type of land use in which, compared to cropping, relatively much freedom is left to natural processes. Current examples of research and experiments of new types of ditch and ditch bank management, meadow bird protection and incentives to stimulate 'nature production', all of them practisable within the range of natural farming activities, show that there is indeed a scope for improved partnership relation (12).

Nature protection and further applications

In any partnership, there should be times and places where the partners may realise their individual potentials, without being bothered too much by the other partner's welfare. This implies that the partnership view speaks out for both the truly metropolitan city, being man's "top-enfolding" without nature, as well as the true "top-enfolding" of nature in other areas (13). This principle may be applied to every appropriate scale down to the level that every schoolyard should have its own huge tree.

Since the partnership notion is of a fundamental character, the principles of this section may be extended, specified and applied to any instance where man and nature meet. This may be something concrete like the design of a zoo, but also something general like the policies of nature preservation in the Third World (14).

2.5 Western Dutch Lowlands: the area and its conflicts

Excluding the coastal dunes, the Western parts of the Netherlands lie below sea level. Clay and peat are main soil types. Its most characteristic visual feature is the typical polder landscape: the open grasslands with its quarter million kilometers of polder ditches in age old patterns, spiced with the small scale beauty of wind mills and villages. In the East, the area is bordered by the higher, sandy lands of Utrecht and Brabant. Between these, the broad rivers Rhine, Waal and Maas, bordered by floodplains, slowly wind their way through. Figure 1 gives an overview.

The area supports a population density of almost 1,000 inhabitants per square kilometer. In spite of this, natural values of international importance are still present, among which the birds and the mesotrophic peat marshes and shallow lakes are especially worth mentioning. This high density of both inhabitants, natural values and cultural landscape values indicate that the Western Dutch Lowlands may be regarded as the focal point of struggle over Dutch rural areas. This struggle has an internal and an external aspect.

Internally, the values of the rural areas are threatened by the intensification of animal husbandry, the very agent that once caused the lowlands to enfold their ecosystem diversity. Formerly, farmers brought about ecological gradients, especially in the nutrient levels of land and water. Nowadays, caught in an unchecked spiral of technological innovation, competition, low product prices and the resulting need for more investments, the farmers spray manure and fertilizer almost everywhere in all seasons, causing more and more plant species to be pushed out by the few hypertrophic super-competitors, like the terrestric rye-grass and the aquatic duckweeds (15).

Externally, both farmers and nature are threatened by the urban sprawl. The relatively sophisticated Dutch physical planning law may have slowed down and concentrated the take-over by suburbs, highways, large scale recreation parks and other urban fringe activities, it has far from

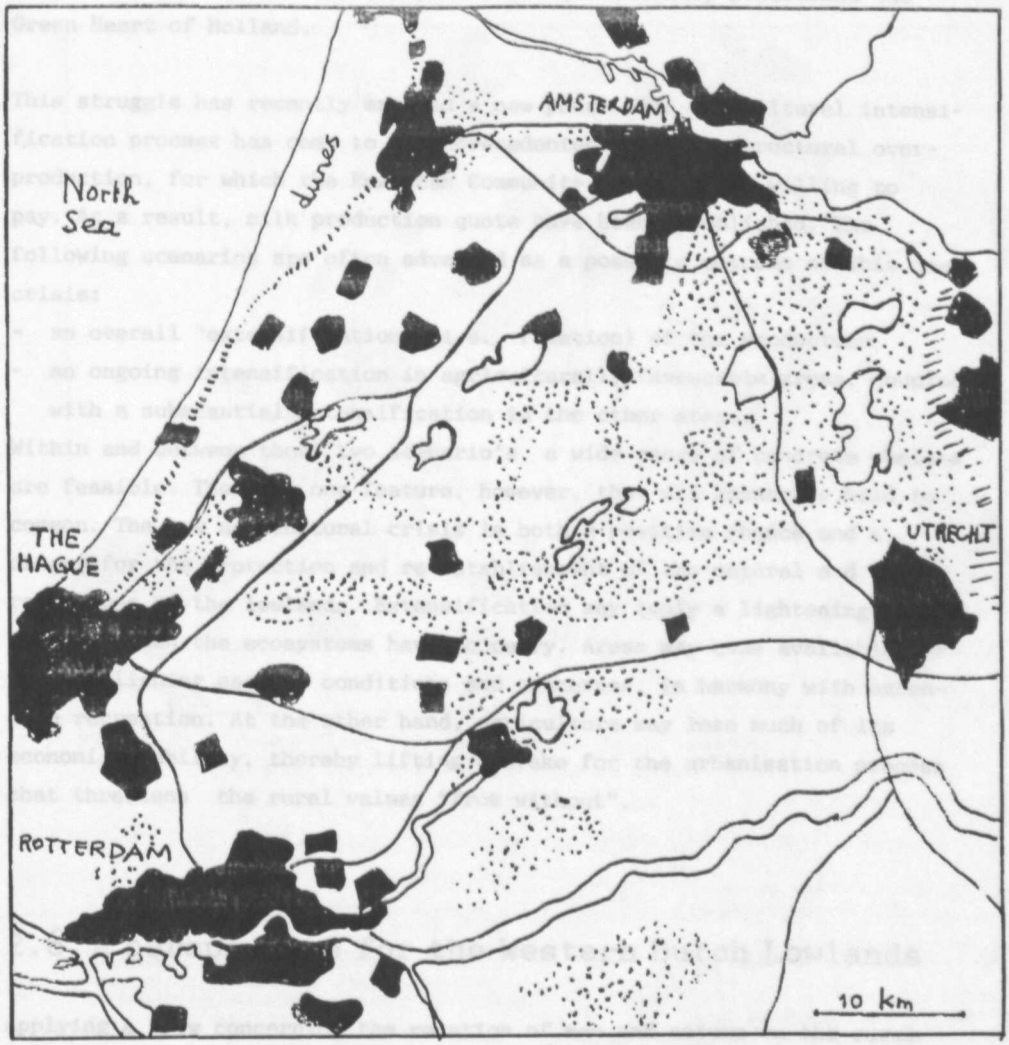

FIG. 1. : THE WESTERN DUTCH LOWLANDS

peat

(mainly) clay

main lake

halted it, even in the central polder area, officially proclaimed the Green Heart of Holland.

This struggle has recently entered a new phase. The agricultural intensification process has come to an unprecedented stage of structural overproduction, for which the European Community is no longer willing to pay. As a result, milk production quota have been established. The following scenarios are often advanced as a possible outcome of this new crisis:

- an overall "extensification" (i.e., fixation) of the production
- an ongoing intensification in agriculturally favourable areas, coupled with a substantial extensification in the other areas.

Within and between these two scenario's, a wide range of concrete choices are feasible. There is one feature, however, that all scenarios hold in common. The new agricultural crisis is both a positive chance and a danger for the protection and re-establishment of the natural and cultural values of the lowlands. Extensification may imply a lightening of the manure burden the ecosystems have to carry. Areas may come available for re-establishing natural conditions and processes, in harmony with extensive recreation. At the other hand, agriculture may lose much of its economic viability, thereby lifting a brake for the urbanisation process that threatens the rural values "from without".

2.6 A perspective for the Western Dutch Lowlands

Applying a view concerning the relation of man and nature on the rural problems of a concrete area and getting a potentially realistic picture as a result implies a confrontation of the view's planning principles (Section 4) with a large number of socio-economic facts and values, physical landscape features and the like. These cannot all be elaborated in this section. Hence, the reader has to trust that enough of them have been digested in the drawing up of the perspective picture, Fig. 2. The figure is confined to the Nothern part of the region, emphasising the Leiden-Amsterdam-Utrecht triangle.

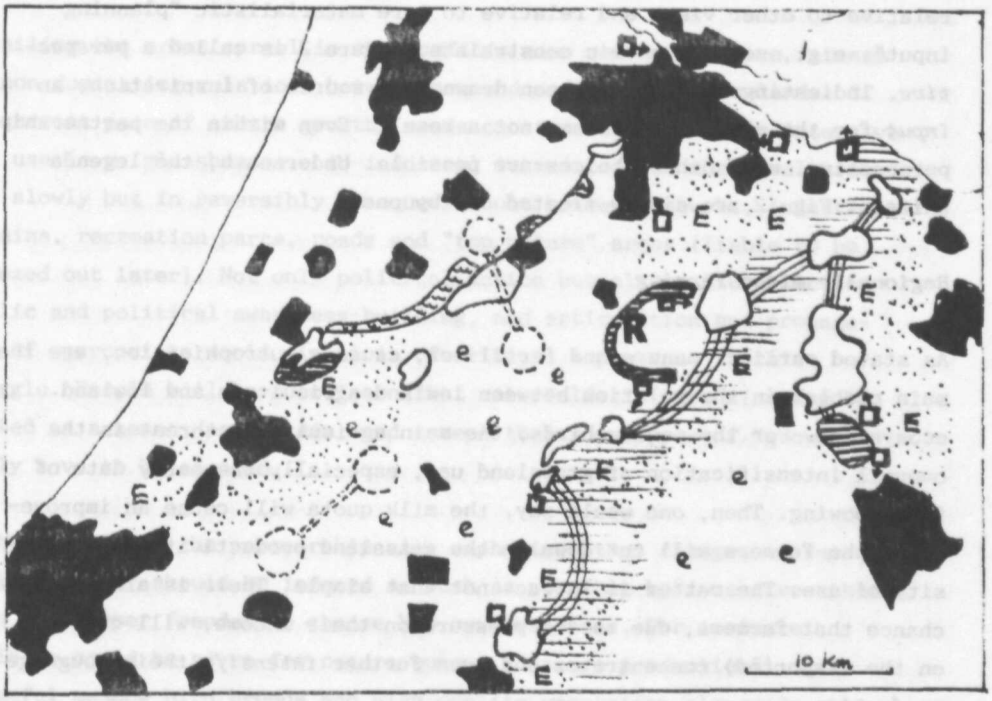

FIGURE 2: A Perspective for the Western Dutch Lowlands, designed from the partnership point of view

Regionally mixed farming. Exchange of fodder and manure between the croplands and cattle areas.

Extensification areas. In principle all cattle husbandry of the lowlands. Focus on grassland production decrease, supported by price measures, e.g., priced nature production.

Old Dutch Water Line. Revival of the historical defence line, as a mixture of raised polder water levels, farmers' support for increased extensification, aquatic ecological infrastructure, appropriate recreation types etc. (A 'Newest Dutch Water Line' reconnects other lakes in the West.)

New lakes (primary recreation function).

Aquatic Ecological Infrastructure, connecting the lakes in the Old Dutch Water Line by ditch systems, marshy patches etc.

'Bike-only areas'. No motorized traffic by non-residents on local roads.

Increased extensification areas. Extra measures and incentives for extensification in appropriate areas.

Water purification peat marshes. Development of multifunctional natural areas designed especially for high quality water output. Arrows indicate output direction.

New nature development areas. Development of top-enfolding of ecological potentials, especially eutrophic reedlands, bogs and swamp forests. Free roaming recreation; no roads. Re-introduction of moose. 'Twin areas' of Amsterdam, Utrecht and Leiden.

'Re-peating' of the Mijdrecht polders, by a slowly closing ring of peat build-up in eutrophic swamp, as above.

Other legenda and names in Figure 1. As indicated by the scale and the informal way of drawing, the map is only indicative for locations. For more explanation: see Chapter 6.

The partnership view may be applied with varying degrees of emphasis, relative to other views and relative to more materialistic "planning input", e.g., socio-economic constraints. Figure 2 is called a *perspective*, indicating that it has been drawn as a source of inspiration, an *input* for the planning process, not a result. Even within the partnership perspective, many other choices are possible. Underneath, the legenda units of Fig. 2 are simply treated one by one.

Regionally mixed farming

As stated earlier, manure and fertilizer, causing eutrophication, are the main problem in the relation between lowland agriculture and lowland ecosystems. For the meadow birds, the main agricultural threat is the overall intensification of grassland use, especially the early date of first mowing. Then, one would say, the milk quota will cause an improvement: the farmers will cut down on the grassland productivity and intensity of use. The matter is in fact not that simple. Their is also quite a chance that farmers, due to the pressure on their income, will cut down on the (imported) concentrates and even further *intensify* their roughage production.

In the partnership view, this risk should be averted by as little regulation as possible, since non-dominating behaviour of farmers should be as voluntary as possible. This might be done by establishing a new regional integration, induced by a substantial levy on fertilizer. The levy will shift the balance for the cattle farmer limiing fodder production. The same levy will increase the attractiviness of using cattle manure in stead of fertilizer for the farmers of the arable land in the clay areas around the cattle area. Currently being faced with low prices for their crop products, these farmers may be stimulated (e.g., by using the levy yields) into cultivating feeding crops for the cattle area.
Many aspects of this arrangement fit well into the partnership perspective: the relatively free choices of farmers, the impact on nature and a more integrated way of farming. Fig. 2 indicates the spatial relation.

Other overall measures

Curtailing the urban sprawl is the *conditio sine qua non* to save intense and non-dominating relations between man and nature in the lowlands. If the current pace of suburb growth, roads construction and super-intensive land use (e.g. glasshouses, bio-industry) is maintained, the rural areas will slowly but in reversibly be squeezed out between suburbs, industrial terrains, recreation parcs, roads and "top nature" areas (liable to be squeezed out later). Not only political action but also cultural action (public and political awareness-building, and articulation and propagation of appropriate world views) is of critical importance in this struggle. People will have to learn that materialistic expansion may be treated as a means, not an aim, and accept that some types of "growth" simply have to be stopped.

As stated before, the partnership view emphasises that changes in farmers' behaviour should be induced as much as possible by incentives that leave the farmer freedom to choose his own responses. For instance, subsidies could be given for nature-output ("nature production"), like succesful meadow bird breeds and high quality vegetation alongside the polder ditches. The same principle holds for price measures for natural products like reed for roof thatching, dredged peat for horticulture and the like. In this field, many technological, social and financial investigations and practices have been started already. These may largely prevent landscape maintenance by government agencies (which is more costly and also culturally less valuable in the partnership view) and broaden the natural production potential of the lowlands.

Old, and Newest, Water Lines

The partnership view is a philosophical input in the planning process. Looking for an other cultural source of inspiration, history is one of the candidates. Since a design for the lowlands should be a design with the lowlands' most characteristic element, Dutch "water history" should be looked into. Then, one encounters a phenomenon still very well known by the Dutch: the "Hollandse Waterlinie", or, more specificly, the Old Dutch Water Defence Line. This was an intricate system to flood a chain of polders very shallowly, making them unpassable by both vehicles and

boats. The oldest Water Line, running as indicated in Fig. 2, was used against the armies quite a lot of current EC-members; later water lines run more East. Nowadays, the Old Water Line is still visible as a chain of isolated "polder lakes" and marshes, containing the lowlands most valuable ecosystems. In Figure 2, the Water Line is re-established as true line, connecting the lakes with an "aquatic-ecological infrastructure" of re-designed canals and road crossings, new marshy patches etc., thereby re-creating a large-scale historical unit as well as increasing the life chances of aquatic populations and communities.

The water line notion may be extended to an other chain: those of the interconnected ('boezem') lakes in the West, once parts of the large Haarlem Lake between Leiden and Amsterdam. They are less valuable from the stewardship point of view, but hold a high recreation potential. In Figure 2 they are re-connected in the form of the Newest Water Line, inundating parts of the cropland of the Haarlem Lake Polder. This new lake system may attain in a character quite different from the Old Water Line. The vicinity of the large cities, the relatively a-historic landscape, the high demand for water recreation and the grandeur of neighbouring Schiphol Airport speak out for acceptance of a relatively man-dominated lay-out. The new space available for water recreation gives a chance to develop new natural values in the South of the chain, the small-scale Kager Plassen and their very valuable peatland surroundings.

"Bike-only areas"

As indicated in the previous chapter, areas may be set aside for recreation with non-dominating and involved means of transport only; biking will predominate in these areas, but canoeing, sailing and other forms of non-motorized traffic are just as well. Motorized traffic is largely restricted to agricultural and habitation purposes. As indicated in Figure 2, these areas partially surround the cities and are used as buffers for natural areas, increasing the chances these may be managed without fences.

Increased extensification areas

Extensification of grassland production may be of extra importance in some areas, for instance those of very high potentials for nature. In

other areas, farmers may be forced to an extra extensification by government regulations, e.g., by raised ground water levels in the buffer zones and the Old Water Line. In both types of areas additional measures may be taken, for instance a higher price for nature production.

Water purification peat marshes

Water quality is a problem in many polders, lakes and city canal systems. Peat marshes have a high potential for removing the water quality key factor, excess of phosphate. Reed and rush fields are already in operation for this purpose in the Netherlands, used as last step in waste water treatment plants. They decrease phosphate concentrations from very high to more normal levels.

The lowlands offer ideal opportunities to extend this idea to the removal of phosphate in a lower range: from normal (i.e., still too high) to low levels. The ideal design is to guide normal surface water gently through a relatively large scale system of ditches, bogs, very shallowly inundated reed marshes etc. These areas can be multifunctional, since they also have a high nature and recreation potential in themselves and may be producers of drag-peat, reed, grass and game. Often, existing landscape features will provide the basic elements. In the partnership view, water purification peat marshes are especially valuable when they produce high quality water for cities and recreation areas, thus creating a new regional relation between man and nature. But, as Fig. 2 shows, they may also be used for polder lake water supply.

New nature development areas

Water purification marshes may work as single units, but may also be built into larger systems: new nature development areas. As stated in Section 4, these are especially feasible as "high nature" twins of the "high culture" areas of the larger cities.

In its original state, the Dutch delta encompassed two types of wet ecosystems: relatively oligotrophic, fragile and static types and also more eutrophic, dynamic, productive wetlands. The former type holds more rare species and communities and is therefore more valuable from the stewardship point of view. The present natural areas and reserves are

managed in the stewardship perspective. Hence, it is feasible to re-establish the full range of authentic ecosystem types by creating new eutrophic natural wetland areas. These may perfectly be managed in the partnership perspective, according to principles mentioned in the previous chapter:

- eutrophic, spontaneous, "tough" ecosystems of wetland forest, bogs and open reedland
- recreationers restricted in numbers, without any help by roads etc., but free to roam anywhere
- a scale large enough for the re-establishment of animals that counter-balance succession by monotonous forest (moose, geese, beaver)
- production of timber, drag-peat, reed, game etc.

The plant material production may best be partially taken out and sold in most cases. In some cases, the new natural areas may be used to *accumulate* their full plant material production, creating new lowland peat soils. Fig. 2 shows one such **Re-peating Area**. This section is concluded with a short description.

Most of the clay areas in the lowlands have come into existence because of "de-peating". From the Middle Ages onwards, people have cut and dredged peat for fuel purposes. Many of the peat exploitation areas were blown out by the wind and changed into inland lakes. Some of them are still present, but most of them were re-impoldered in the 17th and later centuries, resulting in agriculture on the clayish former lake bottoms. For this reason, the present clay areas lie approximately 3 meters below the peat areas. An extreme situation is the Mijdrecht polders area south of Amsterdam. These polders:

- lie at 5 to 6 meters below sea level,
- suffer from severe upwelling of water,
- integrate poorly with the surrounding high-value peat areas,
- would be a top-area for nature and man-nature relationships (both farming and recreation) if "in peat",
- and do not contain high historical-cultural values.

Hence, it seems quite feasible to restore the area in its former state by inducing a natural re-peating process. This may be done by making a dike at a 100 to 1000 meters from the surrounding higher peat zone in the west and inundate the area between the peat and the dike, raising the water

level in the course of the peat accumulation process, that will start immediately because of the natural succession from open water to lowland forest. When enough peat has been formed, a new reclamation dike may be constructed and the process repeated, untill the area is completely re-peated. In every new peat zone, it may be decided either to leave the area in its natural state, or lowering the water table somewhat and restart agriculture.

This re-peating will be a slow process, which is just as well. It will prevent social and economic disruption and leave flexibility to future generations. For the present, the first re-peating zone would already be of great value for nature and partnership with it. And, as said before: in the partnership view also the naturalness of *processes* is valuable, not only the patterns that may result ultimately.

2.7 Epilogue

In the Dutch rural areas, the continuation of 'business as usual' has come under heavy pressure due to the overproduction problems. This has triggered of a relatively fundamental re-thinking of rural policies. This paper has focussed on the environmental aspect of these policies, i.e., nature and the relations between nature and man, expressed in agricultural practices and recreation.

Of course one may be of the opinion that re-thinking of policies will not be, or even should not be, more than a materialistic response to economic events, only slightly less *ad hoc* than normal. It has been the purpose of this paper to indicate that a re-thinking out of *cultural* sources of inspiration does have something to contribute to the discussions, -not only in general terms but also as a concrete input in the planning process. As for the Western Dutch Lowlands, this contribution may be of critical importance if one wants future generations to inherit a better place and a better spirit than Suburbia, a landscape out of which all Otherness will eventually be banned.

Notes and references

(1) Rural policy often implies doing very different things in different places or to different people. The legitimacy of these differences can only be established by showing that a *single*, deeper scheme is applied to all.

(2) Passmore J. (1974), Man's Responsibility for Nature; London.
(3) Maarel, E. van der and P. Dauvellier (1978), Naar een globaal ecologisch model (*Towards an Ecological Model [for physical planning]*), Staatsuitgeverij; The Hague.
(4) Plan Integratie Milieubeleid (*Environmental Integration Policy Plan*), 1983, Tweede Kamer stukken 17931, Staatsuitgeverij, The Hague.
(5) Tjallingii, S.P. and H.E. van der Veen (1984), Natuur en landschap (*Nature and Landscape*), in: J.J. Boersema, J.W. Copius Peereboom and W.T. de Groot (Eds.), Basisboek Milieukunde (*Textbook Environmental Science*), Boom, Meppel, pp. 333-358.
(6) Zweers, W. (1987), De intrinsieke waarde van de natuur (*The intrinsic value of nature*), Alg. Ned. Tijdschr. v. Wijsbegeerte, (19), 2, pp. 137-144.
(7) "Omgaan met water" (see text for translation), 1985, Ministry of Public Works, The Hague.
(8) Van Nieuwenhuijze, L., et al. (1986), Plan Ooievaar, E.O. Wijers Foundation, The Hague.

(9) If you want to really *meet* a bear, pick a role that fits *his* communication repertoire (the shy co-inhabitant if his range; the equal-armed competitor seeking him out; the potential prey, hiding). Watching a nature movie may at best be a second-hand experience of this, but far preferable over first-hand feeding, in the partnership point of view.

(10) This would be the analogue of rehabilitation of the residential areas in inner cities.

(11) For instance, water quality may be largely improved by disconnecting suburban water from the hypertrophic systems that surrounds it, and make better use of clean runoff from roofs. This may be combined with spatial design elements such as marshy gradients and less monotonous alignments.

(12) A general source for information in this field is: CLM, Oude Gracht 197, Utrecht. Examples of written references are:
- Denk aan Uw weidevogels (*Think about your meadow birds*), a practical guide for farmers (CLM)
- Nota Ecologisch Beheer Noord-Holland (*Ecological Management Memorandum*, Province of North-Holland), Haarlem, 1985
- Melman, Th.C.P. and H.A. Udo de Haes (1987), Slootkanten als natuurelement (...): knelpunten en oplossingen (*Polder ditch bank management: bottlenecks and solutions*), Cultuurtechnisch Tijdschrift, in press.

(13) Compare the glorification of an all-rural England in the 'ecological' Blueprints for Survival.

(14) Concerning the latter, it may be noted that the partnership view not only speaks out for the protection of nature as such, but also, as an aim in itself, for the protection of *cultures and activities* that deal with nature in a partnership manner. The partnership view may become a meeting ground for nature conservationists and those defending the rights of tribal people.

(15) Clausman, J., H. den Held and N. van Heijst (1986), De aftakeling van het veenweidegebied is nog te stoppen (*The degradation of the lowland grasslands is yet reversible*), Natuur en Milieu 86/6, pp. 4-9.

Chapter 3

State and Society with Respect to Agriculture and the Rural Environment

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3.1 Introduction

In this essay the policy fields of agriculture and environmental protection are analysed from a political sociology perspective. The way both policy domains are organised and demarcated is of course highly relevant to the politics of the environment and rural areas. It is the interaction of both these 'policy communities' which explains a good deal of environmental policy directed towards agricultural practice.
The main characteristics of policy making with respect to agriculture and the environment are outlined in section two and three of this chapter. To this end key notions like agrarian corporatism and Dutch politics of 'accomodation' are dwelled upon successively.
In section four the way the manure surpluses are handled is studied as a case in which the tenseful interaction between the policy communities of agriculture and environment is put to practice. The manure problem and the corresponding legislation process are raised here to illustrate the way in which state intervention and state-society relations shape environmental policy formation in relation to rural areas.
In chapter five of this Volume manure legislation is treated at more detail as a part of the growing body of environmental legislation in the Netherlands.

3.2 The agricultural policy community

Interest intermediation and policy formation in relation to agriculture are characterised by a corporatist structure, as is delineated in the introductory chapter to this volume. Although agrarian corporatism originates in the pre-war period, it really took off after 1945. Corporatism has been of great importance to the modernisation of Dutch agriculture. A steadily expanding state apparatus functioned as a vehicle of this process of modernisation, which made agriculture the most highly state-managed sector of the economy. Corporatism provided a response to the complexities of administering an economic sector characterised by a myriad of small independent producers. It aided in producing the massive compliance of farmers required to realise the project of agricultural modernisation (Cox et al., 1986a). Thanks to the corporatist rules of the

game the farmers' organizations controlled the sector and assisted in sorting out the 'good' farmers on behalf of the state. The adhesion to the imperative of modernisation, the submission to ever tightening economic constraints and the elimination of the 'weakest' were not perceived as imposed from above, but as the 'natural' outcome of the process of development (Servolin, 1985). This is one of the specific characteristics of agrarian corporatism, the specificity of which derives from a variety of factors. Among these are the structural fragmentation of agriculture, the ambivalent relationship between farmers and the state and the 'technicality' of the agricultural policy field. To analyse the contribution of like factors to the 'instantiation' of corporatism, conceived as a social structure, lies beyond the scope of this article. Instead, the most salient features of Dutch agrarian corporatism will be delineated in the following.

Three central farmers' organizations are playing a part in agricultural interest intermediation in the Netherlands. They are of christian, catholic and liberal denomination. Each of them is based on a number of more or less autonomous regional or provincial organizations. The three central organizations cooperate in the Landbouwschap (Board of Agriculture), in which the two trade-unions of agricultural workers participate too. The Board of Agriculture is a statutory body charged with defending the interests of everyone working in the agricultural sector. It also has to see to the functioning of agriculture as serving the 'general interest' of the economy. This Board of Agriculture has regulative and implementary competences. It monopolises the agricultural interest intermediation. At the provincial level the Board of Agriculture is represented by regional councils, which are dealing with local and regional authorities whenever agricultural interests are at stake. The statutory organization of the agricultural industry also includes the vertically organised Produktschappen, which represent all 'chains' of a sector of production (i.e. primary producers, processing industry, commerce, retail trade). These do have similar competences as the Landbouwschap. Under the auspices of this statutory trade organization officials and deputies of farmers' organizations have a say in virtually every piece of agricultural policy, ranging from disease eradication programmes to land consolidation, marketing schemes, and so forth. They function as a kind of 'primary policy community': they constitute, as it

were, the inner circle of key interest groups who enjoy a more or less close partnerschip with relevant state agencies in the formulation and implementation of policy. The members of this community are recruted from farmers' organizations, agricultural cooperatives and also, be it to a lesser degree, from associations of private agribusiness. They meet each other frequently in the network of advisory committees, boards of implementary bodies, et cetera.

The 'wider circle' of the agricultural policy community is formed by groups located in the periphery of the 'hard core' of productive agriculture. A host of organizations is mixed up with agriculture 'in a broad sense': they find themselves in the domains of nature conservation, water and soil protection, physical planning, recreation, and so forth. Among them are associations of local authorities or (semi-) public bodies as well as interest groups and more radical organizations of environmental activists. The primary agricultural policy community cooperates very closely with the Ministry of Agriculture and Fisheries in formal as well as informal circuits. This symbiosis is such that in some respects the Ministry may be considered an essential element of the articulation of agricultural interests to other departments and to wider society. In a sense, the Ministry can be regarded part of the policy community. As far as the staff of the Ministry is concerned a complex set of intertwining personal relations with the agricultural interest organizations is traceable. The present Minister of Agriculture, Mr. Braks, has been a secretary of the influential North Brabant Christian Farmers Union. The president of the National Christian Farmers' Association presents the most recent example. He has become director-general of the Ministry. His comments on this appointment are illustrative:

> "The close collaboration between entrepreneurs and Government is unique in the world. That's why I am not going to tell another story in my new position. In this place I can serve the interests of Dutch agriculture as good as before. As far as the central features of agricultural policy are concerned no fundamental differences exist between Government and the Landbouwschap" (Agrarisch Dagblad, 1987a).

Consensus building by elites of farmers' associations and relevant state agencies is an important feature of the corporatist structuring of the agricultural policy community. Reaching consensus is facilitated by a technocratic ideology. Political choices can be circumvented and solutions can be left to 'technical' specialists by reducing questions of

agricultural policy to technical problems (Berkelder, 1986). Corporatism can be expedient in depoliticizing social conflicts (Offe, 1981). The technocratic character of agricultural policy formation explains the considerable weight of professional staff among the farmers' organizations, even at the regional level. These professionals make the farmers' lobby a full-fledged interlocutor of the state. Not only the Ministry of Agriculture disposes of proper research institutions - unlike the other departments -, the central farmers' organizations equally have their 'own' research stations.

Besides technocratism other ideological elements also play a part in the signification of agrarian corporatism. As Winter (1984) argues "ideology is obviously important to the development of appropriate structures in which corporatist arrangements can flourish".
Free agricultural entrepreneurship and the 'general interest' of agriculture stand out as important aspects of the ideology of agrarian corporatism. The massive exodus of farmers is legitimised with reference to the notion of the free entrepreneur: he bears the risk of a failure, that's all in the game of the 'free market', on which he operates.
The ideology of the general interest of agriculture justifies the monopolization of interest representation by the Board of Agriculture: it represents agriculture, which is perceived as homogeneous. The existence of diverging or conflicting interests is denied. Which interests are best served is mystified. The use of the term 'agriculture' denoting a homogeneity, a separate economic sector with its distinct, non-industrial characteristics, is greatly misleading and full of ideological implications (Snyder, 1986). One of these is conceiving agricultural policy as an exclusive domain to be reserved to specialists. This conception has corroborated the one-sided productivism and expansionism in agriculture to the detriment of other funcitons of the countryside. Promoting the general interest of agriculture implies emphasising unanimity: keep your 'front' strong and closed. In this way the Board of Agriculture can function as a forceful spokesman of the agricultural sector. Accentuating unanimity means disciplining the constituency. The close symbiosis of state and farmers' organizations works out in a similar way: individual members should not put obstacles in the way of their organizations, united in the Board of Agriculture, for they really endeavour to get out of the negotiations in The Hague and Brussels whatever they can to the

advantage of 'agriculture'. This legitimation of policy is strengthened by the high degree to which the farmers' organizations participate in the implementation of policy measures. An illustrative case in point is the implementation of the milk quotas. The farmers' organizations saw themselves set the unthankful task of figuring out a complex set of provisions and regulations to render acquiescent the many farmers who solicited for 'more milk'.

The members of the permanent commission of agriculture of the second chamber of parliament may be considered to belong to the 'Green Front' (Louwes, 1980). Via formal and informal canals the 'agrarian' members of parliament of the centre and right wing parties are integrated in the agricultural policy community. Influencing agricultural policy making is normally left to this permanent commission: other members of parliament regard it a terrain to 'intricate' and to 'specialist' to get involved in. That's one of the reasons why agricultural policy making for a long time stood out as a relatively isolated and closed political subsystem. Agriculture is gradually attacked more, however, as the agricultural development meets more clearly with limits of surplus production, pollution, damage to landscape and nature, animal 'welfare', and so forth. This 'crisis' in agriculture justifies speaking of a 'policy community under siege' (Cox et al., 1986b). The external pressures from various sides are reflected in internal tensions in the agricultural policy community. As the path of continual growth of agricultural production is blocked up, 'rights to produce' have to be distributed and political choices become inevitable. Consequently, divergences among farmers and among their organizations come to the forefront. Trying to disguise their internal differences the farmers' organizations sometimes hesitate to take an unambiguous stance in controversial matters. As a consequence, it is the Ministry that decides without them, jeopardizing the habitual mode of consensus building.

3.3 The environmental policy field

The domains of environmental and agricultural policy making differ significantly in some important respects.

First of all, public concern about the environment is a rather recent phenomenon, dating of the late sixties and the early seventies. The

concept of 'environment' (milieu) is fairly new: up until about 15 years ago, it referred primarily to social environment and not to the total physical context of human well being (Tellegen, 1981). Only since 1971, the environment is represented in the departmental structure. In that year, the Ministry of Health and Environmental Protection was formed (at present the Ministry of Housing, Physical Planning and Environmental Protection, abbreviatory called the Ministry of VROM).

Second, the environment is not a coherent policy object, handled by only one ministry. Crucial elements of the environmental policy field are not the prime responsibility of the Ministry of VROM. This refers, for example, to nature conservation, landscape protection, water management and energy policy.

Third, the Ministry of VROM is not backed by a powerful societal constituency, grounded in the social division of labour. The functional interest groups of business and labour don't belong to the key interest groups of the environmental policy community. A defining characteristic of a corporatist political structure is lacking therefore (Panitch, 1980). Other features of corporatist policy formation are absent too, like monopolisation of interest intermediation, institutionalization of the negotiations between state and societal actors and, finally, a substantial delegation of regulative and implementary competences to societal organizations. Of course, the structure of environmental policy making partly reflects the constellation of state society relations in general. So the 'politics of accomodation' (c.f. chapter 1) constitute an historically rooted aspect of the environmental policy field in a broad sense (i.e. not limited to environmental protection). The 'rules of the game' of Dutch politics since 1917 are summarised by Tellegen (1981) as follows:

(i) a businesslike attitude towards politics
(ii) the depoliticization of potentially divisive issues
(iii) cooperation among different elites, and
(iv) acceptance of Government decisions.

These rules of the game influenced attitudes and strategies of goverment and environmental organizations. Government is accustomed to ask private organizations for advice on controversial issues. The politics of accomodation facilitate the cooperation of persons from different ideological backgrounds in the environmental organizations.

In spite of these similarities the environmental policy field is markedly distinct from the corporatist system of agricultural policy making. This distinction corresponds with differences in object and history of the policy fields concerned. For a long time, the state has taken a liberal stance to the protection of the physical environment. As far as nature conservation is concerned, the principle of state 'abstention' was tenaciously maintained. Although announced as soon as 1928, a nature conservation act was only promulgated at the end of the sixties! (Van der Valk, 1982). The passive attitude of government, which was persevered up until the end of the sixties, promoted a strong tradition of private nature conservation organizations. These date of the beginnings of the twentieth century. Notably stemming from elitist initiatives, these private organizations adopted an apolitical style of nature protection in accordance with the politics of accomodation.
A second corollary of state abstention is the fragmentation of the policy field as well as the development of a strongly decentralised policy system. Fragmentation is best illustrated by 'Waterstaat'. This government department is responsible for both the construction of dykes and canals and the building of other major infrastructural works like roads and bridges. Waterstaat is often called 'a state within the state' because of its powerful position in decision making on infrastructural schemes and related environmental issues.
Provincial and municipal authorities, water boards, polder councils and similar institutions make up the decentralised policy system. The province of Gelderland, for instance, set up a provincial nature conservation regulation in 1939, because the state continued to neglect the issue (Van der Valk, 1982). Waterboards and polder councils are charged with the protection of water quality and with the regulation of water supply, which can have far reaching environmental implications. As local landowners have a strong influence in the waterboards, the interests of agriculture may be stronger than the interests of conservation.

Especially from the end of the sixties onwards, a great number of new environmental organizations have been founded. Some of them, like the Stichting Natuur en Milieu, form a continuation of already existing organizations. These are oriented, in the first place, to influencing governmental policy in a participatory way. By developing their own expertise they try to be taken serious as interlocutors in decision

making processes (Cramer et al., 1987). Some environmental organizations initially took a more radical stance, but they clearly demonstrate tendencies to 'pragmatic realism' at present. The Vereniging Milieudefensie (the Dutch branch of Friends of the Earth) has adopted a 'pragmatic line' in the eighties (Cramer et al.,1987), having abandoned its radical and profoundly critical position of the seventies. It has become a protagonist of a new business-like approach (Volkskrant, 1987a). This approach means sticking to concrete alternatives and technologies, which are to be realised in the context of present-day industrial society. Apart from the new environmental organizations, traditional associations have maintained their influence. The Vereniging tot Behoud van Natuurmonumenten (Association for the Preservation of Natural Monuments), established in 1905, is by far the largest environmental organization of the Netherlands with 245.000 members (Volkskrant, 1987b).

The social heterogeneity of the environmental policy community is best illustrated by the membership of the Central Council of Environmental Protection, which advises government on environmental legislation and policy implementation. Besides a bunch of environmental organizations and so-called experts, its members include representatives of employers' and employees' organizations and of consumers' associations as well as representatives of provincial and local authorities and water boards. The fragmentation of the environmental policy field and the heterogeneity of the societal constituency inevitably evoke interdepartmental conflicts and often lead environmental interests to have the worst end of the staff. As government can be perceived as a 'heterogeneous conglomerate of departments all pursuing their own, widely differing, interests' (Tellegen, 1981), conflicts between the departments with a stake in environmental affairs and the Ministry of VROM are only to obvious. Tellegen also makes clear that the coordinating role of the Ministry of VROM is rather weak since the Minister has no real influence on environmental matters that are the prime responsibility of other departments. In his historical study, Van der Valk (1982) indicates that agriculture, housing and road construction in the post war reconstruction period all were of higher priority than nature conservation. External integration is pursued by the Ministry of VROM as a means to compensate for its lack of coordinating power. Paying attention to environmental aspects should become an integral part of policy making at every department dealing with environ-

mental matters. Departments and interest organizations of non-environmental policy communities have reacted to this initiative by developing a kind of 'contra-expertise' in environmental affairs. The Board of Agriculture, for instance, disposes of an environmental staff and special commissions on the environmental aspects of soil use, spreading of manure, (ground)water management, and the like. Moreover, the Board of Agriculture is represented in the Central Council of Environmental Protection, the Council of Waterstaat, the Advisory Commission on the Purification of Water and in several branches of the Advisory Commission on Harmful Substances of the Ministry of Agriculture (Landbouwschap, 1984).

All too often environmental legislation is 'empty' (Drupsteen, 1985): it merely provides for a procedural framework, that has to be 'filled up' in social practice. Environmental policy in particular shows up numerous forms of 'evading' strategies (Glasbergen, 1985). Procrastinating substantial legislation by procedural regulations is one of the well-known modes of 'policy evasion' in environmental policy formation. By this process of 'policy evasion' the essentialia of environmental decision making and implementation are rendered object of social contest. The legislation pertaining to manure surpluses also has the characteristics of this framework type of regulation: it will take a long time of socio-political struggle to get rid of this thorny problem of animal waste disposal.

3.4 Tackling the manure problem: a case of conflicting policy communities

Warnings against the deleterious effects of growing manure surpluses were raised already at the beginnings of the seventies. These cautions were ventilated by agricultural research (De la Lande Cremer, 1972; De Haan, 1972; Kolenbrander, 1971) as well as by the environmental movement (Algra et al., 1972). On the part of the Ministry and the agricultural industry the problems were denied or minimized. In 1972 already, the Dutch Central Office of Statistical Publications had constructed a model to calculate manure surpluses. By way of delaying tactics, however, the Ministry of Agriculture and Fisheries has known to block the publication of these figures for years (Handelingen, 1985). Interdepartmental rival-

ries have precluded soil protection and manure surpluses to enter the political agenda. Officials of the Ministry of Health and Environmental Protection strifed for a broad, integral Law on Soil Protection. Officials of the Ministries of Agriculture and Fisheries, Transports and Waterstaat, Economic Affairs, Home Affairs and Housing & Physical Planning prefered a law of complementary character, only meant to catch up with the environmental aspects of existing regulations. After five years of quarreling preparations were started in 1976 to make a Law on Soil Protection and to review the existing Law on the Quality of Fertilizers. This decision only rang in a period of renewed political-administrative conflict. The Ministry of Agriculture and Fisheries claimed to monopolise the regulation of the manure problem via a new law on manure and fertilizers (Meststoffenwet) of its own. A political compromise was finally reached in 1982/'83. The Ministers of VROM and Agriculture would both sign the Soil Protection Law (Wet Bodembescherming) as well as the renewed Manure Law (Meststoffenwet). The Soil Protection Law (prime responsibility of the Ministry of VROM) would lay the basis of a set of rules concerning the use of manure. The Manure Law would provide a framework for the complementary regulation of manure levies, restrictions to expansion or relocation of intensive livestock farming, registration of manure production, transportation of slurry via the Mestbank, and so forth. For both laws the bulk of substantial regulative measures had to be covered by distinct implementary resolutions. At the end of 1984, a high level interdepartmental committee was formed to prepare these resolutions. Numerous interdepartmental working groups fell under this directive committee. The committee functioned as the political arena, where interdepartmental conflicts were fought out. In these fights, the Ministry of Agriculture has had the better end of the staff. This Ministry could mobilise important advantages. As far as agricultural practice is concerned, it monopolises all expertise. The Ministry disposes of its own research institutions. And last but not least, it is backed by a strongly organised lobby.

The resulting regulations are obviously organised on agricultural lines. Farmers will still be allowed to bring rather large quantities of manure to their lands. During a period of approximately 15 years standards will be tightened up only very gradually. Effective legislation is severely hampered by 'technical' considerations of agricultural farm management

and controllability. Manure legislation did not take into account regional differentiation of nature and landscape values, as indicated in physical planning schemes (RPD, 1985). The flexible standards are delaying adequate solutions for years; norms on basis of nitrate and metallic content are wrongly left aside (Natuurbeschermingsraad, 1986). The comments of the majority of the Central Council of Environmental Protection (the representatives of the Board of Agriculture excluded) are also very critical (CRMH, 1987). The final standard is not clear and not strict enough. In the next ten years to come, environmental qualities will continue to deteriorate as a result of the manure surpluses. Certain vulnerable regions of nature value will lack adequate protection. It is notjustifiable that the manure legislation still allows for an increase in intensive animal-farming in the Netherlands. The restriction of the periods of land spreading of dung are far to loose. The manure regulations don't pay sufficient attention to problems of maintenance and control. So far for the criticisms of the Central Council of Environmental Protection.

Securing economic viability of large scale intensive animal-farming has been an important starting-point of all manure legislation. The Manure Law has been taken for an agricultural law in the first place: manure surpluses are handled as a technical problem. By the Manure Law this problem is removed from the sphere of environmental politics. All efforts are focused on pragmatic solutions like slurrey transports, ploughing-in and injection of the manure, demineralization of the animal feed, processing and working up the slurrey to some kind of 'organic fertilizer', and so forth.

Everything is tried to secure the current mode of expansionist agricultural production. An implementary resolution restricting relocation, expansion and establishing of intensive live-stock holdings was only accepted by the agricultural lobby, provided it would be of a (very) provisional nature. Dissident utterances of some categories of farmers - e.g. small or starting farmers, more radical farmers - pleading structural policy measures in relation to solving the manure problem, are systematically ignored. Environmental policy ought not to be 'misused' to push through structural changes in agriculture, the argument goes. The dissidents advocate a settlement law (stipulating conditions on which it

is permitted to establish an agricultural holding) and a state-managed (re)distribution of 'rights' to produce pigs, chickens and eggs. This should be regulated by way of a 'quotum-bank'. These farmers fear the 'weakest' will drop out of the race, which will be re-intensified as a consequence of the manure legislation. The financially 'fittest' are best suited to conclude contracts to get rid of their dung surpluses, to buy production 'rights' and to make the necessary investments. Moreover, serious qualms exist with respect to the practicability of the complicated manure legislation. The bureaucratic and detailed regulations 'invite' to play tricks and hamper possibilities of control. In this way the 'smart' entrepreneurs could go on aggravating the manure problem at the cost of their less 'dynamic' colleagues and to the detriment of environmental quality. As far as the observance of the rules is concerned, the experiences with the so-called Interim Law on the limitation of pig and poultry farms are highly discouraging (Frouws, 1986). Refering to the alarming increase in pig-farming during the period of validity of the Interim Law, mr. Winsemius, ex-Minister of VROM, stated: "The flexibility of local authorities and the inventiveness of farmers have been demonstrated to an ample degree by these developments" (Boer en Tuinder, 1987).

Central-local relations play an important part in the implementation of the manure legislation. Provincial authorities are vested with powers to make special regulations for soil protection areas and groundwater-protection areas. Provincial policy is coordinated by the Ministries of Agriculture and VROM.
Municipal authorities are charged with carrying out the regulations of the Nuisance Act and of 'Allocation Plans', both enabling to tackle some aspects of the manure problem. Allocation plans need the approbation of provincial authorities. Finally, tasks are delegated to farmers' organizations, e.g. organising the system of the Mestbank.
This network of central-local relations contains some conflicting elements. In general, at the provincial level more attention is paid to environmental protection than by local authorities (where local agricultural lobbies often function rather smoothly) or by government (where the Ministry of Agriculture and Fisheries plays a strong part). A recent example of a conflict produced by this constellation of administrative forces, is rendered by the provincial decision to prohibit manure-'im-

ports' into the southern region of the province of Limburg. This decision is contested by local farmers' organizations in the northern part of the province as well as the Ministries concerned. Setting up the Mestbank system by the farmers' organizations themselves is not without problems either. Conflicts have been raised between surplus regions and other areas where farmers are short of manure.

3.5 Concluding remarks.

The crisis in agriculture calls for a growing degree of state-management, which evokes, however, increasingly contradictory tendencies. These contradictions re-induce in turn to more state-interventionism, and so on (Coulomb et al., 1977). The corporatist system of policy formation is pressed to the limit and the 'high degree of instability that marks corporatist structures within liberal society' becomes manifest (Panitch, 1977). Offe (1981) has argued that the stability of corporatist arrangements depends on conditions of unity in the participating interest organizations, a docile organizational tradition and sustained economic growth. He points to the fragile legitimacy of the corporatist structure, which will be sapped if corporatist policy formation becomes object of a generalised political debate. Several of these destabilising factors are at work in present agricultural policymaking.

Agricultural expansionism has reached its limits. Nothing is left to bargain in the negotiations between state and interest organizations. The 'expanding sum' situation of economic growth is transformed to a 'zero sum' situation. In this context corporatist policy formation is denuded of its 'technical', depoliticizing character, because political choices have become inevitable (as to determining the size and structure of future intensive live-stock farming).

> "This (corporatist) context of bargaining prevents zero-sum-game situations from occurring. The participating interest groups, vulnerable to discernible defeats, do not run the risk of becoming 'winners' or 'losers': instead they are sharers in compromises where all parties gain something, and for which they take a common responsibility" (Heisler, 1974).

Several authors equally emphasize this destabilising effect of zero-sum-situations (Nieuwenhuize & Van der Ploeg, 1986; Woldendorp, 1985).

In the case of the manure problem, diverging interests are playing a part among the farmers' organizations and among their members. Differences have become manifest, for instance, between 'manure surplus regions' and regions with a manure deficit, between arable farmers and animal farmers, between small and large farmers and among different categories of animal farmers themselves. Disciplining the constituency of farmers is rendered more difficult. The diminishing legitimising capacity of agrarian corporatism comes out of recent pleas to strengthen the articulation of sectoral interests to the detriment of the representative monopoly of the Board of Agriculture.

Farmers' organizations seek to avoid political choices in order to safeguard internal unity. They ostentatiously feel 'surprised' or 'overruled' if the Ministry then takes the decisions autonomously. The relationship between the state and the agricultural interest organizations is also strained by the threats to the exclusivity of the agricultural policy field. The Ministries of VROM and Welfare, Health and Culture claim parts of it. The Ministry of Finance resists the financial burdens of market policies. In a recent past the Ministry of Agriculture has 'absorbed' the domains of nature conservation and recreation. As a corollary, more attention is to be paid to claims from these sides. Parliamentary interference with the manure regulations has been comparatively intensive, which meant an assault on the isolation of the agricultural policymaking system.
The recent formation of a rival farmers' organization perhaps also can be understood as a 'sign on the wall' (Agrarisch Dagblad, 1987b). The ongoing process of implementing the ensemble of manure regulations has proved to be of great relevance to the stability of agrarian corporatism in the Netherlands.

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Chapter 4

The Institutionalizing of Environmental Policy in the Netherlands

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ness. As the awareness takes a more specific form, the government finds that is has to adopt a more structured policy with regard to the environment; hithero it had operated a rather piecemeal policy field via a number of different bodies. The result of this is that the policy field becomes separated and differentiated from the rest of government policy and a specific section of the government becomes responsible for the quality of the environment. As in every process of institutionalization this development served as strong stimulus.

The sixties

By the early sixties the post-war period reconstruction is complete. The people are reasonably prosperous and more mobile than ever before, they are well insured for old age, illness and infirmity and can be optimistic about the futere. It seems self-evident that there will be a further increase in the prosperity which was based on free enterprise and private industry and was accompanied by a stable parliamentary democracy (reflecting equally stable social relationships in society). For many people the international cultural criticism that developed, even among certain groups in the Netherlands, came as a surprise. In the second half of the sixties things that had long been taken for granted began to be increasingly challenged and questioned. Traditional and respected attitudes and achievements in politics, the church, education and culture were questioned and re-evaluated. There soon came a realisation that economic growth could also have negative consequences. This led to the search for a different kind of prosperity which can be summarised by the term "selective growth". At the same time people began to realize in what way the environment could be damaged by uncontrolled economic growth.[1]

Whereas concern for the environment had hitherto concentrated mainly on the largely non-political matter of nature conservation, now action groups were formed whose members pressed for a reduction in the pollution of air, water and soil. It is striking, that initially these groups have a deep distrust of the government and industry. Their protests are not only a way of expressing their concern about the environment, they are also an expression of dissatisfaction with international relations and the side effects of increased prosperity. More and more people become concerned about the quality of the environment. This is partly due to a

number of dramatic (international) cases of environmental pollution which reveal the unexpectedly serious effects that such pollution can have on public health and on ecostysems. A little later came the first reports of the Club of Rome and the U.N. conference in Stockholm, both of which are of great importance for the development of Dutch national awareness of environmental issues.

From these reports two important factors come to the fore:

a) First of all pollution must be tackled by adjusting the economic process of production and consumption. This process is causing not only more and more forms of pollution but also more and more harmful forms of pollution;

b) Secondly, there is a growing realisation that the longer the delay in the introducion of counter-measures, and the further the environmental situation deteriorates, the more irreversible will be the damage to the environment and the greater will be the need for drastic intervention in the future.

The seventies

At the end of the sixties the process of consensus-forming about the seriousness of environmental problems is so far advanced, that a series of rules and regulations can be drawn up. At that particular time the public considered the pollution of air, soil and water to be the most important political problem in the Netherlands. Later in the seventies concern about pollution diminishes sharply and attention switches to the problem of unemployment and inflation[2], but conditions are still conducive to the development of environmental policy. The Nuisance Act, dating from the previous century, is vivified. In 1969 the first "modern" environmental law, the Surface Water Pollution Act, comes into force. At the beginning of the seventies a good foundation was laid for a policy for protecting the quality of the air: the Air Pollution Act (1970). Other acts from this period are the Pollution of the Sea Act (1975); the Chemical Waste Materials Act (1976); the Waste Products Act (1977); the Noise Nuisance Act (1980); the Interim Ground Cleansing Act (1981). In 1972 a new department was set up; the Department for Public Health and Environmental Protection acquired an independant position at the national government level. Three assumptions played a role in development of

environmental policy. They demonstrate how highly the public rated the government's potential for solving the problem:

a) the assumption that it is primarily the government's task to formulate a policy to combat environmental pollution;
b) the assumption that the government can perform its function best by imposing regulations and prohibition orders to curb the forces in society which are largely responsible for the environmental pollution;
c) the assumption that the improvement of one sector or one subsection will benefit the environment as a whole.

Environmental policy began to take shape largely on the basis of these assumptions. The objectives are to restrict and if possible stop or control various forms of environmental pollution and to take preventive measures. The achievement of the seventies is that comprehensive legislation is enacted at national level in a relatively short time. Government control should be exercised mainly via these laws and the resultant permits, sets of norms, product criteria etc. Most of these permits are granted by the provincial and municipal authorities who can themselves impose environmental regulations. The ultimate quality of the environment is often a result of decisions taken at local and regional level within a framework of legislation passed at national level.

The eighties

A great number of laws has been passed; some overlap and some fail to cover certain situations. Among the reasons for this state of affairs are the sectional approach and the fact that various departments are involved in the formulation of environmental policy. When the department of Public Health and Environmental Protection was set up in 1972 some people expected that this ministry would play the principal role in tackling all the environmental problems. Their expectation was not realised. The department confined itself to dealing nervously with matters of environmental pollution, other departments retained the duties and powers with regard to other sections of environmental policy. As a result nature and landscape management remained with Culture, Leisure and Social Services; water pollution came under Transport and Communication; countryside planning came partly under Agriculture and Fishereries; energy supply and control of boring and drilling activities came under Economic Affairs etc. This state of affairs led to a great deal of friction and many

conflicts. In addition the implementation of the legislation proved to be more difficult than expected.

Without claiming that our list is exhaustive, we distinguish some of the most striking trends in the eighties as follows:

a) The first important development is the increasing emphasis on the complexity of the problem. On the one hand activities which threaten the environment have to be tackled in a particular manner, but on the other hand they are linked with so many activities (e.g. via the export of pollution activities) that combatting of one type pollution can cause yet another type. This means that steps have to be taken not only in a) seriously polluted (redevelopment) areas, but also in b) still "clean" areas to ensure that these areas stay really clean. Such measures require that policy be coordinated and integrated and this is now one of the basic themes of policy planning;

b) A second development is the shift of emphasis from policy preparation and policy shaping to the implementation and enforcement of environmental law(s). Because there has been considerable publicity about a number of cases of environmental pollution the weakness of the procedures for environmental policy enforcement have been exposed. Harmonisation of the rules for policy enforcement, standardisation of regulations and streamlining of monitoring activities are the new subjects which require attention in the eighties.

c) In the third place it has become clear that increased government involvement with the environment and with the associated legislation has not always led to efficient government action. As a result, people have considerable reservations about the new legislation which is characterised by more flexible plans and norms, less detailed legislation and a certain preference for policy instruments which set out to stimulate (via taxes, dissemination of information, consultation etc.) producers' and consumers' sense of responsibility.

4.3. The development of concepts about planning

As man's potential to interfere with nature and his environment was increasing, the idea took shape that society could also be changed by deliberate human intervention. What exists now does not necessarily have

to go on existing. This is the notion behind the welfare state and behind environmental policy which is a specific expression of the caring role of government.

The general concepts about government planning and the changes that occur in it are reflected in the changes and developments in environmental policy.

Basically planning is a combination of ideas about social control, action with an eye to the future and programming of that action. Different aspects receive emphasis at different times. Planners work with a series of concepts - these vary according to the groups in society which are involved in the planning discussion. But clear trends (forming the cultural mainstream) can be recognised in Dutch planning. These trends can be summarised as follows:

a) planning with the government as travel guide;
b) planning with the government as driver;
c) planning with the government as relief driver.[3]

Planning with the government as travel guide

The essence of this type of planning is a plan that has been developed on the basis of research and purposeful policy thinking, with a view to realising a desired situation in a certain year in the future. The plan sets out a programme for future action and is worked out in a cohesive set of means and objectives. Such a plan also gives an indication about the time when the means should be applied and when the ojectives should be reached. Policy is then directed towards the realisation of the plan by the year specified. It is assumed that both the plan and society will develop gradually and consistently in the direction of the goal. With this type of plan the authority concerned must control events in society, in all its facets and sectors, by virtue of the political system, and this control must be based on a view of society as a whole. The government is the obvious example of an authority that can pursue such a policy. In the Netherlands this type of planning (with the exception of town and country planning) has never been got further than the theoretical stage. Over the years all possible objections to the plan have been raised.

For instance:
- this type of planning is too dictatorial to fit into a bourgeois democracy wich requires that plans be discussed and that the views of the public be considered in the planning. Whenever there is a great variety of desires and needs, which also change with time, planning must take these into consideration and leave some leeway for possible adjustments;
- the assumption that a policy can be completely controlled and directed centrally by the government is in fact an illusion. The central government does not have enough specific information available to assess what is desirable or possible. Furthermore the bodies which are required to implement policy do have so little power to make adjustments that they cannot function adequately.

Planning with the government as driver

The practical and ideological objections to the above type of planning have contributed to the search for a type of planning that is less authoritarian, leaves room for compromise and leaves the detailed working out of the plans to decentralised political administrative bodies and to the private sector. Planning has to provide a point of reference, but this is more a proposed direction than a fixed goal and allows for the required flexibility. Flexibility is the means of attaining most of the declared objectives. This system is characterised by the fact that the planners are free to folllow various lines of thought: planning means being on the way to an objective which may change or shift. In this type of planning the emphasis is not on the the final goal but on the moulding of developments. We see this concept coming to the fore in the planning procedures of the seventies.
Four features were particularly important:
- emphasis on purposeful planning and on the mobilising potential of imaginative thinking for social action;
- the search for links between objectives in integrated scientific systems;
- future-oriented planning in the sense of programmes and integrated paths of development for the long term;
- stimulating individuals and private organisations to participate in planning by means of public hearings, surveys, public enquiries, consultative and advisory committees.

This type of planning is a learning process in which analysis, formulation of objectives and evaluation go hand in hand. Progress monitoring, in other words the periodic collection, analysis and evaluation of information about the way the planning is actually working out in practice, and if necessary subsequent revision of plans, plays an important part in concept forming.

Planning with the government as relief driver

The heyday of planning is over; quite recently there has been marked reduction in planning and planning activities. The notion of moulding society is gradually retreating into the background.
One of the suggested reasons for this is that planning does not produce the expected results. Studies of the results of planning activities can lead to extreme scepticism bordering on fatalism. There is now a strong tendency to put the main emphasis on autonomous action by sectors of society, by groups and by individuals. Here are some typical pronouncements about planning today:
- planning should not have too many objectives. It should stem from established practice and be rooted in this;
- planning should be at the point of intersection between government and private sector pressure groups. It should fit in more with links and associations that have developed in the course of time;
- the government should be prepared to operate less authoritarian and more as an equal force in society.

Summerising, we can say that in recent discussions about planning there is still emphasis on the need for goal-oriented, balanced and innovative action on the part of the government. In the working out of the plans however, the emphasis is more on accepting the existence of institutional associations and the interplay of forces in society and on the acceptance of the responsibilities involved.

4.4. Environmental policy and concepts about planning

If we look back over this rough sketch of how the various concepts about planning have developed we are struck by the fact that elements such as

planning for the future and programming are actually being pushed more and more into the background. Planning should be less comprehensive and less intense and there should be more emphasis on the private sector and the independence of established pressure groups. Prior to the eighties the principles of the welfare state were never in dispute. As a result of the economic recession however, which became increasingly serious at the and of the seventies, doubts arise about whether the state (and thus the government) can or should continue to stand as guarantor for a large part of the collective social well-being of its citizens. The discussions about the task and function of the government are particularly interesting in this respect. The government is criticised for its unclear policy and its inefficiency. From this angle the welfare state itself would be partly responsible for the problems. Many regulations are made, but they have to rely on collective services facilities and thus become dependent on the welfare state. The basic concepts became privatisation and deregulation. This shift away from centralised legislation also influences environmental policy and it becomes increasingly evident that the sectional approach to problems, which was a feature of the seventies, is only partially effective as fas as environmental problems are concerned.

The tension between control and autonomy

Environmental problems are to be seen as the result of human activities that are often desirable or even necessary. These activities in combination however have undesirable effects on the environment, the question for the planners is then how human activities can be influenced so as to prevent or control the negative effects. In searching for solutions one can either argue in favour of strong government control or one can opt for a policy that makes use of the natural management potential of individuals and bodies in society. In the first instance the government plays an important part in the reduction of environmental pollution. The government tries to tackle the environmental plroblems in an orderly and systematic way. The quality of environment that is desired is specified at central government level. The regulations concerning emissions, discharges, noise etc.are formulated in terms of the desired objective. The implementation of these measures is left to lower organs of government. This was the main approach to environmental protection in the seventies when it began to be strongly institutionalised. Legislation and

planning are two of the most important tools that the government can use to operate its environmental policy. In such a situation the policy is repressive and rigorous and can only be operated with strict organisation and detailed legislation. In the seventies experience is gained with the sectorial approach to environmental problems.

The obvious disadvantages of this approach are ascertained later. One of the main objections to the sectorial approach is that rights and instruments are regulated so differently in so many different laws. These differences are determined more by departmental traditions and the degree of environmental awareness than by the matter regulated. Moreover there are no provisions for the coordinated application of various different laws on one societal activity. Nearly every modern law of the environment involves a separate system of permits. But the permits are not in tune with one another. Moreover they are issued byorgani different bodies. In the Environmental Health General Provisions Act (Wabm, 1980) an attempt is made to harmonise environmental legislation and promote coordination by standarising the planning, the setting of norms and the issuing of permits. The Wabm will then form a bridge over the sectorial fragmentation of environmental legislation. It stands over the sectorial legislation and regulates matters which the sectorial laws have in common or which are beyond the scope of a sectorial law. The law should ultimately become a basic or general environmental law. The Wabm can be regarded as a reaction to the inefficient tackling of environmental issues in the seventies and works a change in planning concepts.

Towards the end of the seventies criticism of environmental policy increased. Much of the criticism is directed at the lack of cohesion in the legislation, the lack of (long-term) vision and the low priority given to the enforcement of environmental law. These points of criticism are mainly connected with internal policy management; they are not directed at the actual concept of control. More fundamental criticism comes from those who believe that environmental policy should be more than the imposition of rules and prohibition orders that restrict the functioning of individuals and bodies in society. In environmental policy hitherto there has been considerable emphasis on combatting the most obvious forms of pollution, partly via measures applied at source (factory, car), partly via the removal of the effects of pollution (e.g.

removal of soil-pollutants). Environmental policy is therefore largely a policy of reaction (to a particular situation). However, it is becoming increasingly obvious that environmental policy needs to be preventive and therefore anticipatory in character. Characteristic for this type of policy is that it attempts to influence human activities that cause pollution in such a way that they become acceptable ecologically. In other words, doubts are being expressed about the principle of authoritarian control.[4]

Environmental policy in transition

The above-mentioned developments in environmental policy show that the government wants to influence the behaviour of groups in society in a new way. There is talk of "internalizing" of environmental awareness; the groups in society need to feel responsible for the environment and on that basis begin themselves to act responsibly in environmental matters. This shift is reflected in the following ways:

a) increasing reliance on market forces. Consideration is given to the possibility of using financial stimuli (special taxes, subsidies) rather than regulatory instruments in order to attain environmental objectives;
b) efforts to extend the system of environmental norms. Norms can partly replace official standards. The latter leave little scope for individuals and bodies in society to choose their own solutions. By setting norms one can designate priority areas which these individuals and bodies can support with their own resources. The norm then becomes a kind of testing point;
c) the improvement of communication and information. One of the drawbacks of government control was that authorities tried to enforce the required behaviour without having reached any consensus about the type of measures involved. By making contact with social groups and individuals at an early stage the authorities hope they can enlarge the societal basis for certain administrative measures and encourage people to work out their own solutions.

The more general shift in the government's views about policy management is also expressed in the planning of environmental policy. At national level future planning will be shaped mainly by an Environmental Policy

Plan and a Programme for the Implementation of Environmental Policy. The former will set out the main lines of environmental policy (strategic elements) for a period of 8 to 10 years; at the same time the policy will be developed as far as possible against a background of long-term prospects (20 to 30 years). The implementation programm (operation level) will be fixed annually for a period of not longer than four years. These plans will largely replace the plans and programmes that are associated with current environmental legislation. Steps will be taken to ensure that in every case there is an environmentel policy plan at national and provincial level and that there is also an implementation programma at national level. The most important function of planning is now seen as preparing the way for future decisions. In general this preparation should not go as far as to completely determine the outcome of these future decisions: other organs of government must be left a certain amount of leeway so that they can react adequately to unexpected developments. The external function of planning becomes apparant in that an appeal is made to the individuals and groups in society to adjust their decision and actions so that they fit in with proposed government policy. An appeal of this kind can serve two purposes: it can be a means of winning support (extending the social basis) and it can set an example (for more similar behaviour by government and the groups in society). In this way planning becomes a (partial) alternative to legislation which seeks to force third parties into taking certain action.

The latest development in national environmental policy is that priorities have been grouped in certain themes which will form the basis of policy; these themes are: acidification, manure and fertilisers, spread of pollution, removal of the effects of pollution, damage to the environment. In addition there are linked measures which are devised for special areas - the North Sea, the Wadden Sea etc. Efforts towards integration and a more consistent enforcement of legislation continue. The above-mentioned themes will be tackled systematically along two lines: limiting the pollution at source and combatting the effects of pollution. In practice this is most of time a policy of reaction to environmental threats.[5]

4.5. Conclusion

Environmental problems are among the most complex problems there are. There is such a variety of flora and fauna, ecosystems and man-made threats and interacting forces that a misunderstanding or underestimate of these variations can quickly lead to new unforeseen problems. This means that great demands are made on government and government policy. The situation is complicated by the fact that pollution of the environment often does not become visible until many years later and frequently is irreservible. A policy of reaction needs to be followed by a policy of prevention. But environmental problems are so complex that a preventive policy is also difficult to operate and control. The recent history of environmental policy in The Netherlands shows this quite clearly. In the sixties people begin to be aware of the problem. There is an increasing prosperity and it is believed that environmental policy can help to correct some of the negative consequenses of prosperity. There is a certain optimism about the government being able to mould society in a systematic way. In environmental policy this leads to an impressive system of legislation, but it is very fragmented. It is the government which fulfils an initiating, stimulating and regulatory function. The tasks of the lower organs of government are of a supportive nature; they assist with the implementation of the legislation passed by the national government. In practice what this means is that the practical part of environmental policy is carried out at provincial level and also partly at municipal level. An important element of policy is compulsory planning. This leads at the end of the seventies to a complicated system of regulations. In the course of the seventies when the economic tide turns, the weak points in the system become increasingly obvious. Faith in the planning potential of the government dwindles. The principle bottlenecks turn out to be:

a) disputes about the precise responsibilities of various goverment bodies;
b) the inadequate implementation of legislation;
c) the sectional approach to environmental problems, leading to an incoherent series of laws;
d) the lack of cohesion in the planning system that has been developed.

The eighties are characterised particularly by the simplification of the planning system and a reduction in planning as an instrument of environmental policy. The sectional approach is abandoned and replaced by a thematic approach. The legislation is harmonised. This process is still going on. All this is happening in a cultural climate in which the government is calling increasingly upon groups in society to give tangible proof of their concern for a less polluted environment.
If we look at environmental policy in isolation, then the changes we see can be interpreted as a reaction to the problems that have arisen as a result of the initial methods that were used to institutionalize the policy field. A practical solution to the problems was required. However, if we study changes that have occurred in the broader cultural climate, particularly in ideas about government planning, then we see how closely environmental policy is linked with these changes and that this policy in fact stems from them. In this sense too, environmental policy is a policy of reaction. Nevertheless a system of constraints to agricultural developments has been developed. The tensions that are arising from that are discussed in the next chapters.

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Chapter 5

Environmental Regulation and Agriculture in the Netherlands

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In this paper I have tried to picture the origin of environmental policy with regard to agriculture in the Netherlands. I have envisaged environmental policy in a broad manner, consisting of both an environmental protection policy and a policy for nature and landscape.

In the first half of the paper a description is given of the nature of the struggle for power and the development of environmental policy. Glasbergen deals with this subject by noting that until recently agriculture has been on the leeside of environmental legislative measures.

In section 5.2 I will give insight into the allocation of tasks concerning environmental policy with regard to agriculture. In the next parts of the paper a short reference is given to research on the effectiveness of environmental legislation applied to agriculture, namely the Nuisance Act and the land-use plan for the rural part. Effectiveness refers to the extent in which these instruments add to the conservation of environmental qualities. Recently a new policy line has been promoted by the ministry. Keywords are 'external integration' or how to make it more valuable for businesses to keep up certain environmental standards.[1] In the last section section a description is given of the establishment of the Interim Act and Soil Protection Act.
Conclusive remarks are made by comparing the various legislative measures described.

5.1. The Struggle for Power and the Development of Environmental Policy: in Retrospect.

In the period before 1970, environmental policy was mainly directed towards regulating the use of some xenobiotic and waste substances. Agriculture did not seem to be very damaging, and was considered to be a sector which, by definition, was ecologically sound and harmless to nature. The farmer was considered to have a shaping and conservating influence on the landscape. The same attitude applied to other business sectors: growth, expansion, intensification, and more and more production. Agriculture was not limited in any way by land use regulations. The land-use plan for the rural part, which is part of the Physical Planning

Act, regulates the designation and use of land. Under this law, municipalities are obliged to have a land-use plan since 1965. The primary function of this land-use plan was to regulate the urban claim on the rural areas.

The Seventies. In this period a powerful environmental movement arose as a result of the heavily increasing environmental pollution. This movement did not only campaign against the side-effects of industrial production, but also concluded that the agricultural production process contributed substantially to the destruction of nature and landscape qualities in the Netherlands. The activities of farmers were no longer considered to only adjust themselves to the possibilities offered by the land. Moreover, the notion grew that rural areas had a value in their own right, apart from their agricultural production function. Since then conflicts between nature and agriculture increased steadily.

In 1972 Mr. Algra of the Foundation for Nature and Environment already pointed out that, because of the increase in intensive livestock breeding, manure problems would escalate into a massive nuisance[2].

In the early eighties a further change of attitude occured. Slowly people began to realise the government would not be able to solve the agriculture-environment conflict adequately. This awareness induced new initiatives for co-operation between farmers and environmentalists, such as the Centre for Agriculture and Environment, the Foundation for Nature and Environment, and the Young Farmers Association. Environmental problems in agriculture increased to such an extent that even the farmer's own production conditions were in danger of being affected. Reports were published on copper poisoning in sheep due to excessive manuring of grassland, yield losses due to acid rain, and a decrease in soil fertility due to deterioration of soil structure. Recently we were alarmed by the pollution of drinking water in the Westland, which was a result of the use of methylbromide for soil treatment in glasshouse horticulture. According to a provincial inventory, 1,000 million guilders will be required on short notice to clean up the soil.

In the meantime, the surplus production of Dutch agriculture has now become a political problem, because the EC-member states are no longer

willing to bear all its budgetary burdens. Manure production has increased enormously. Added to an impending saturation of the markets for intensive livestock breeding products, this resulted in acute restrictive measures. People start to realise that agriculture as a whole should take a different course. Even the agricultural organisations themselves are convinced that the present situation can no longer be maintained. The conflict about which kind of direction is desirable, is now fought out at the national level.

5.2. Institutions and Regulations

Environmental policy with regard to agriculture is shaped at the three government levels. Firstly, there is the municipal level: here the citizen encounters the land-use plan and municipal regulations, which restrict the scope of his/her activities. The rules at local level are binding for the citizens. At the provincial level there are regional plans, provincial environmental plans and provincial regulations. These plans and regulations give direction to the municipal measures and supplement the national regulations.

The majority of the legal regulations is issued at national level, in particular by the Ministeries of Housing, Physical Planning and Environment, of Agriculture and Fisheries, and of Welfare, Health and Cultural Affairs. The ministry of Agriculture and Fisheries holds most of the power strings concerning the environment in the rural areas, since this ministry has recently incorporated the responsibility for nature protection and open air recreation, alongside with, and actually subordinated to, its traditional agricultural interests. The ministry now claims to be concerned with the entire conservation of rural area quality. How far responsibility reaches will be illustrated later in this paper by the description of the establishment of the Soil Protection Act.

Roughly, there are three kinds of environmental regulations with regard to agriculture:

A. General environmental regulations which are valid for all activities: the Noise Nuisance Act, Waste Substances Act and Physical Planning Act.

B. Specific regulations with respect to the agricultural production process, by which the amount of environmentally-damaging substances, allowed to end up in the soil, the water and the air, is regulated: the Soil Protection Act, the Pollution of Surface Waters Act, the Nuisance Act.

C. Specific regulations with respect to the products supplied by agriculture:
   - the crop-protection methods used
   - animal medicine
   - residues
   - foodstuff additives
   - measures which are aimed at maintaining nature and landscape
   - the Relationship Report contracts
   - the Investment Regulation Act.

Altogether, the necessary protective restrictions on agricultural (ab)use of the environment have come late; at least late in comparison to other sectors of society. At national level the policy is to make it clear to individuals it is in their own interest to maintain certain environmental standards. The earlier mentioned examples of problems with glasshouse horticulture, sheep poisoning and so on support this policy.

5.3. The Effectiviness of the Land-use Plan

The land-use plan is a local plan and most of the municipalities have such a plan in operation. It may contain prohibitions, for instance on the ploughing up of grassland. It may also describe what is permitted. Violations of the land-use plan can evoke sanctions, or they can demand a restoration of the previous situation[3].
However, research appears to prove that the effectiviness of land-use plans is not satisfactory,

a) because, in many cases, there are still no land-use plans for the rural part of the municipal areas, even though all municipalities are obliged to establish such plans since 1965.
b) because, consciously or unconsciously, many violations still occur.

In a study by Van Schaik and Wingers (1986)[4], the land-use plans of 17 municipalities were studied. Their conclusion was that 'the observance of the land-use plan regulations is in a sorry state: very many violations occur'. According to this study, the most important violations appear to be the ploughing up of grassland, the filling in of ditches and the levelling and removing of hedgerows. Most of the violations have been committed by agricultural users of the land (62%). Many violations have also been reported in connection with land re-allotment.

The observance of land-use plan regulations in areas with a mixed designation (that is, agriculture and, for instance, 'great landscape and scientific value') shows many shortcomings. In most municipalities supervision is limited to building regulations. The manner and the scope of the supervision explain the fact that only 13% of the violations found in the study became known to the municipality. When violations were in fact noticed, they usually did not result in sanctions. Finally, only in the case of 3.4% of the violations the previous situation was restored partly or completely. In total 3,555 violations were noticed, and action was taken against only a 121. An important explanation for the large number of violations by farmers is their unfamiliarity with the regulations: 73% of the violations mentioned in the study were commited unconsciously. If the farmers were indeed conscious of the regulations, managerial considerations mostly appeared to be so overwhelming that farmers still did not comply with the land-use plan. In case the farmer thinks there is a fair chance that the municipality will demand restoration of the previous situation the degree to which the farmer acts in accordance to the land-use plan is greater, however. Other factors that contribute to farmers' compliance to the regulations turned out to be:

- the possibility of a fine;
- the evalution of the chances of getting a permit;
- the time it will take for a permit to come through;
- the estimation of the damage to nature and landscape;

- the possible wish to be able to decide independently on the business and the land;
- and the degree of acceptance of certain restrictions.

5.4. The Effectiviness of the Nuisance Act

The Nuisance Act (1952) is the oldest and, up till recently, the most important act in the field of environmental protection. Its objective is to prevent nuisance, damage or danger, that built structures (such as factories), may cause to the environment. Farmers, and in particular, intensive livestock breeders often have to deal with the Nuisance Act. Every such business is obligated to have a license, but only 23% of the 163.800 agricultural enterprises actually has one.[5]

In 1981 the act was changed and -in addition to nuisance to people in the direct beighbourhood- more general environment nuisance was also included. Municipalities were provided with definitions on the interpretation of the act by means of a brochure published by the government. Since February 1987 environmental organisations have a say in the granting of licenses.

Why is the Nuisance Act adhered to so poorly? First, farmers are not familiar with the fact that they are subject to the Nuisance Act. Secondly, when a farmer seeks to apply for a permit, the farmers unions will give him their support, and when they expect that granting the permit will cause problems, they will advise the farmer not to apply for it in order to let sleeping dogs lie.[6] Thirdly, the municipalities are also rather passive when it comes to the execution of tasks under the Nuisance Act. Reasons for this are:

- not enough money and not enough staff are available for supervision;
- there is limited knowledge of the act, particulary in small municipalities;
- there is no unambiguous system of standards, so that checking is a subjective matter;
- municipalities make concessions with regard to the Nuisance Act for the sake of employment.

These conclusions were drawn from the study by the Ministry of Housing, Physical Planning and Environment on how the organization and execution of the Nuisance Act and related environment tasks were executed nationwide in 1983.[7]

Anyway, the Nuisance Act was not meant no curtail the environmental effects of intensive livestock breeding in the first place. The Act only refers to the outhouses and the animals in them, not the manure itself, nor to its spreading on private land. The latter causes the biggest environmental problems.

5.5. Manure Legislation

In order to tackle the problem of manure surpluses, the Soil Protection Act and the Manure Substances Act had already been in preparation for some time by 1984, but the rapidly increasing manure surpluses demanded an emergency act.
On November 2, 1984, the Interim Act on Restriction of Pig Breeding and Poultry Farming was enacted unexpectedly. The act was to be valid up to 22 January 1987. The preparations were kept secret because it was assumed that the unexpected proclamation and immediate implementation of the act would be able to stop the explosive growth in the sectors concerned. The proclamation of the Superlevy for dairy farming was one of the reasons for this; many dairy farmers started up an intensive pig our poultry sideline branch.

Despite its unexpected proclamation, the Interim Act did not check the pig investment wave. Apparently many permits had already been granted which had not yet been availed of; the outhouses had not yet been built and the animals were not yet in there. The number of pigs increased by 10% in the period from November 1984 to December 1985, a growth figure that had not been reached for years![8]
The expectation that after the first wave this would come to a standstill was not fulfilled. In 1986 another 9% was added.[9]
The poultry sector experienced a growth of more than 10% over the whole period.

During the period of operation of the Interim Act civil servants were feverishly working on the replacement of this legislation. The first of these activities, centering around what would later become of the Soil Protection Act, dates back to 1974, when the Minister of Agriculture and Fisheries sent a report on Intensive Livestock Breeding to Parliament.[10] In it he stated that he expected the increase in intensive livestock breeding was now coming to an end, and he declared a furhter increase unlikely. If the increase were to continue, he expected that a manure surplus would occur in the eighties. Legal measues were not provided for. The environmental movement thought that the minister was concealing the actual problems. In a brochure of some years previously, entitled "Factory Farming", the seriousness of the situation had already been analysed. On one subject both parties did agree: the Physical Planning Act would, in principle, be able to control the spatial consequences of intensive livestock breeding by setting up zones around residential areas or vulnerable landscapes. However, the municipalities and provinces hardly made use of this possibility. In retrospect, the policy report of 1974 indicated the main aspects of the manure problems, but trivialised them because of the economic importance of the agricultural sector.[11]

In the second half of the seventies the environmental movement received support from an unexpected side. The public water supply companies raised the alarm because they noticed that (due to the thightening up of the EC-norm for the amount of nitrate in drinking water), the norm in some wells was exceeded. As a result, manure applications research into the relationship between groundwater quality and manuring in the concentration areas of intensive livestock breeding got into full swing. The results were alarming, but little was done from the side of the government. Up to in the eighties the range of policy instruments for fighting the harmfull consequences of intensive livestock breeding remained very limited. In 1985 yearly a total of 40 million tons of manure were produced in excess of what is needed for plant growth.

The representatives of both parties at national level, Environment and Agriculture now seriously went to work in order to draw up the Manure Substances Act and the Soil Protection Act. The Manure Substances Act

regulates the transport and the storage of manure, as well as the levy on it. The Soil Protection Act regulates the manuring of the land.
The points of departure for the ministries involved were very different. The opinion of the Department of the Environment is that a standard should be laid down which, phased in over time, would stop the accumulation of manure substances in the soil. Along with this, the Department of the Environment suggested the use of a different standard for areas with a high nature and landscape value than for purely agricultural areas. The Ministry of Agriculture and Fisheries' civil servants acknowledge the seriousness of the problem, but calculate its impact according to a purely agricultural point of view. They completely reject differentiation according to specific areas, because this would create legal inequality between farmers. In the course of time negotiations began to focus on the height of the manure application standards and the phasing in of their introduction. The standards which were finally included in the act are too high to be good for the environment. Moreover,the standards in the first period of the implementation of the act are even higher, so that the farmers will not be put to great expence and industry will get a chance to provide technical solutions for that part of the manure that will not be permitted to be spread on the farmer's own land.

The final text does not contain any area differentiation, but does include a differentiation according to the use of the land (see table 1). Because of the high standard for the manure application in the first period (up to 1991) the situation for the environment will hardly improve. In the second period, a gradual decrease of the level of the standard will follow. This also holds for the third period. The final standard which should come into force after the year 2000 has not yet been decided upon.

Tabel 1 shows that the environment standard (withdrawal norm) has been sacrificed for the sake of compromise.

Table 1: The standardization for the use of animal manure substances in kilogrammes Phosphate per hectare/per year

Period	Grassland	Green Maize	Arable Land
1-1/87/1-1-91	250	350	125
1-1-91/1-1-95	200	250	125
from 1-1-95	about 175	about 175	about 125
about 2000	final norm		
(withdrawal norm	110	75	70)

Opninions are divided on the quality of the legislation. In particular the lack of standardization for other manuring substances than phosphate (amongst other things, nitrate) and heavy metals (cadmium, zinc, copper) are point of discussion. This especially concerns the tendency towards decreasing the phosphate concentration in animal fodder. Although a favourable development in itself, it increases the amount of other manuring substances which a farmer is allowed to spread on his own land, because the standards have been laid down in terms of phosphate only.

5.6. Concluding remarks

Agricultural polution has become to be regarded as one of the most serious environmental problems of the eighties. This growing awareness has led to rather prefound changes in the nature of environmental regulations directed towards agriculture.

Recent regulations, emonating from the Soil Protection Act and the Manure Substances Act, interfere with agricultural production methods, whereas older 'environmental' measures only applied to land-use or to the prevention of polluting effects (e.g. regulating waste disposal).

A further change pertains to the powers of maintenance and control which have been shifted from local and provincial authorities to the national administrative level. Farmers have to send their 'manure book-keeping; (i.e. the registration of manure production and -use) to the Department of Agriculture and it is the inspection service of this same national

department that is vested with the main surveillance tasks in virtue of the manure legislation.

The making of the manure regulations has also brought about a close cooperation between the two national departments most concerned, i.e. of Agriculture and Environment. As a result, every piece of environmental regulation with respect to agriculture which is henceforth enacted, is a 'co-product' of Agriculture and Fisheries on the one hand, and Housing, Physical Planning and Environment on the other (be it an adjustment of the Nuisance Act or the restriction of the use of pesticides). As a consequence, compromise has become an in-built character of all environmental legislation directed towards agriculture.

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Chapter 6

Land Development and the Environmental Question in the Netherlands

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6.1. Introduction

The rural environment performs many functions for society. We may distinguish ecological, cultural, economic, information, educational and recreational functions. As shown in Figure 1, each function is connected to interest groups stressing its importance.

Figure 1: Interest groups in relation to the functions of the rural area

Rural area function	Interest group	Institutionalization or form of organization	Ultimate goal:
agricultural production	farmers agro-industry consumers	farmers' and agri-business union consumer organization	raising farm income, e.g. by modernizing agriculture low food prices
ecological function	scientists people concerned with the environment	coalition with organizations concerned with cultural function	management of a viable planet and of natural landscapes
cultural function	nature-lovers	various associations concerned with conserving nature and scenery	a diversity in the incidence of natural communities and scenery
social welfare function	recreationers local population	no specific organization	a varied natural and regio-bounded landscape
recreational function	recreationers	organizations concerned with outdoor recreation	a landscape that is varied and looks natural, with certain facilities

(Source: Slangen, 1987; adapted)

During this century, technology, urbanization, commercialization and the economic emancipation of the agrarian population have promoted the emergence of a pronounced antagonism between those who give priority to the economic production function and those who stress the importance of the non-economic functions of the rural environment. The agricultural ideology has come to be opposed by a nature and landscape ideology in which many non-agricultural functions of the rural environment have been united.

6.2. Rural planning in the Netherlands

In the Netherlands, a distinction must be made between physical planning and land development. The former has an urban background, the latter is of rural origin. Until the 1960s, both planning systems operated completely separated from each other. Since then, procedures have been implemented to adjust both systems to each other, but the distinction continued to exist.

There is a long tradition of modifying the physical environment. State intervention to enlarge the "carrying capacity" of rural land for agricultural use dates back to 1924, when the first Land Consolidation Act became operative. The original aim was to reallocate holdings which had been fragmented by the gradual opening up of the land and by repeated subdivision of farms. Gradually, however, land consolidation developed toward a complete reconstruction of rural areas, including the improvement of water management, road systems, public utilities, the location of farm buildings, landscaping, recreational facilities and the removal or enlargement of uneconomic smallholdings (Takes, 1971).

After the second world war, the growing demand for land consolidation projects made it necessary to instigate a procedure at the national level so that the projects could be selected and prepared. National planning standards and standard technical and economic norms for the re-organizing of rural land became more decisive in the preparation and the content of the projects. The core of the "full-dress" land development programmes since the 1960s is agriculture, seen as an economic activity, but they also allocate land to a number of other rural uses, such as forestry,

nature conservation and recreation. However, physical land use plans to allocate land for housing and industrial use are developed separately.

The core of the 1954 Land Consolidation Act and its successor the Land Development Act (1985) is the provision of procedures for the implementation of programmes for the restructuring of rural land at the local level: (1) procedures to relate the land development plan to other land use plans, (2) procedures that facilitate the implementation of policies related to agricultural production, (3) procedures to inventory and present the other sectoral claims on rural land except housing and industrial use, (4) procedures to provide proper consultations and decisions. Compared with other European countries, the procedures involved are long and very formalised (Finch, 1987; Holzner, 1987).

6.3. Institutional forces in land development

Rural development in the Netherlands has never been a local interest only; it is promoted principally for reasons of national-economic interests (Holzner, 1987). In this respect, Dutch land development lies at the opposite extreme to the essentially locally based approaches in France and Italy (Finch, 1987).

The agricultural interest is very well organized at the national level. First of all, the agricultural sector within the Ministry of Agriculture and Fisheries is large and tightly knit. Secondly, as Frouws describes in this volume, the institutional structure of agricultural organizations stretches almost unbroken into the world of politics, "green front" lobbies, research and education institutes, agribusiness firms and so on. The position of the nature and landscape interest is quite different. Objectives are pluriform and vague; there is in fact no comprehensive policy concerning the non-agricultural functions of the countryside. Recreational aspects are spread over two ministries and water policy over three ministries. Nature conservation has been shifted from one ministry to another; it is nowadays a small section within the ministry of Agriculture and Fisheries, largely subdued by the overall agricultural interest and caught up in a paralyzing process of continuous reorganisation. Nature and landscape conservation do have a large support in the public opinion, but this diffuse phenomenon does not carry much weight in the institionalised corridors of power.

Legally, the final decisions concerning land development projects lie on the local level, i.e., local land development committees. The factual planning and design, however, is carried out by specialists from the national Government Service of Land and Water Use, operating under the ministry of Agriculture and Fisheries, using national guidelines and applying a narrow range of centrally decided design options. A case study revealed that the role of the local committee is legitimizing rather than guiding (Elfrink and Thissen, 1984). The local committees are dominated by the farmers and farmers organisations like the polder boards. Generally, the (single) representative of the nature conservation interest groups is viewed as an alien, urban influence, to be kept outside of the planning process.

Taken as a whole, therefore, land development in the Netherlands is largely still an unchecked machine, operated at the national level, driven mainly by economic objectives, which in their turn are fuelled by the political view of Dutch agriculture as an export sector specializing on competition on the EC level.

No wonder, then, that land development projects tend to favour the already "advanced" farmers, marginalizing and pushing out the smaller and less industrial holdings. The remaining farmers face an increased commercialisation of their activities, with decreased farm individuality, decreased contact with land, animals and neighbours, - non-material values still clerished by many rural people (Volker, ...).

These social backdrops of land development lay a basis for counterforces within the agricultural sector. Partly, this internal counterforce is voiced by organisations, especially of young farmers. They have had little impact up till now, but this may change if they are reinforced by the external counterforces, to be briefly reviewed in the next section.

6.4. Toward a more balanced interplay of rural functions?

Notwithstanding the setting aside of isolated nature reserves within land development areas, the intensified land use, drainage, roads and relocation of farmsteads have marked negative impact on ecological diversity and landscape values (Froment and Wildmann, 1987; Harms, 1988). In

the 1970s, this became widely criticized. It is typical for the positivistic scope of rural planning in the Netherlands that the first response has been a scientification of procedures, e.g., the establishment of an evaluation procedure in which all rural functions are tried to be taken into account. This may have resulted in a mitigation of the negative impacts, but certainly did not reverse them.

An other early action was less procedure-focussed. The 1975 Memorandum on the Relation between Agriculture and Landscape conservation put forward concrete proposals for "nature management agreements" that could be accepted voluntarily by individual farmers. In 1982 the rules were made more flexible, but the farmers' response remained below expectations. The rate of increase in agreements has speeded up in the last years, however, and 12 000 ha are now under agreement, involving farmers in meadow bird protection, the maintenance of hedgerows and the like. Although not unsubstantial, this still is only a small portion of the rural areas, insufficient to counterbalance the trend of nature and landscape decline.

There is a great need for an innovative, "second generation" type of land development. Several trends point into a potentially positive direction. First of all, the European agricultural excess production may decrease the pressure for ever increasing land use intensity. Secondly, it has become clear that Dutch agriculture creates pollution and waste problems that may threaten its own sustainability (acidification, manure excess, loss of soil structure, erosion; see Bolsius in this volume). Thirdly, new research creativity is visible concerning regional planning (e.g., De Groot in this volume), nature policy instruments and nature conservation techniques compatible with current agricultural practise. Fourthly, many attempts are being undertaken to bridge the ideological, social and practical rift between farmers and environmental interests, especially by informal groups and NGO's. Whether this will result in a new approach to rural problems, or only in somewhat less of the same thing, however, remains to be seen.

Bundel/Volker2/jp

ANNEX: Project description and list of participants.

Project title: The Politics of the Environment and Rural Areas. A Comparition of British, French and Dutch Policies, Structures and Attitudes.

Objectives of the project

The project aims at comparing:

- the different conceptions of and approaches to environmental problems in Britain, France and the Netherlands;
- the response of the respective governments and their strategies to cope with environmental problems;
- the perceptions of local populations and their reaction to institutional decisions.

The comparison will be grounded in an analysis of the problems associated with agricultural change.

Now that Britain, France and the Netherlands pursue policies for agriculture, regional development and environmental protection within a transnational framework, it is more than ever important to achieve mutual understanding of essential national differences and similarities. This is the aim of the project: to explore the implications of common trends in different contexts.

Program and method of work

Small interdisciplinary teams of British, French and Dutch social scientists (5 people on each side) draw together some of the key researchers on the topics of environment and rural areas in each country. They meet together for intensive discussions of prepared papers in a series of meetings over a three year period.

At the first meeting, held in April 1987, the historical and institutional framework of environmental policy in relation to rural areas is studied. The following three meetings are organized by way of Country Case Studies. These are oriented towards concrete problems in each

country. These comparative case studies concern the themes of nature and landscape conservation, national parcs and pollution by agriculture. Finally, the project will focus specifically on the supranational dimension to agricultural environmental problems. The effects of the Common Agricultural Policy and the Environmental Action Program of the EC and the role of international conventions and transnational associations will be addressed then.

Participants in the project "Politics of the Environment and Rural Areas"

On the British side:

Philip Lowe,	Lecturer in Countryside Planning, University College London, coordinator of the British research team.
Graham Cox	Lecturer in Sociology, University of Bath.
Michael Winter	Director of the Centre for Rural Studies, Royal Agricultural College, Cirencester.
Anne Stevens	Lecturer in Politics and Chairman of the Graduate Division of Contemporary European Studies, University of Sussex.
David Baldock	Research Fellow, Institute for European Environmental Policy, London.

On the French side:

Maryvonne Bodiguel	Senior Rural Sociologist, CNRS, University of Nanterre, coordinator of the French research team.
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