"ROLES OF ENGOS IN NITRATE CONFLICT MANAGEMENT" CASE STUDY: THE NETHERLANDS AND FLANDERS, BELGIUM

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Abstract

In developed countries, conflicts between environmental interests and agricultural emissions can not be avoided. Within the legal formal perspective, it is often assumed that all environmental conflicts are solved through the legal-formal system. In reality, however, the conflict between environmental concern and agricultural practices is complicated by wide variety of interests and mere legal formal approaches will not be adequate to solve them. This conflict as it relates to nitrate emissions will be referred to herein as the 'nitrate conflict'. The role of civil society, in this case the Environmental Non-Governmental Organizations (ENGOs), are often neglected in the nitrate conflict management. This study will document and analyze nitrate conflict management in the Netherlands and Flanders Belgium, on the roles of ENGOs regarding the issue. Moreover, the research will emphasize the important role of ENGOs in civic engagement in developing democratic and just environmental management.

Key words: Environment, ENGOs, Nitrate Directive, Conflict Management.

A. Background

At present, environmental degradation is widely recognized as a problem. In many places, attempts are being made to improve the quality of the physical environment. Nutrient emissions from agriculture are considered a formidable environmental problem in countries with intensive agricultural. Nitrogen, phosphorous, nitrate and ammonia are examples of surplus emissions in the environment resulting from agricultural practices, whether organic or inorganic.

Moreover, the earth has lost 15 percent of its topsoil over the last 20 years due to inappropriate agricultural practices. Water logging, saturated solution of salt and alkalisation affect another 1.5 million hectares of mostly irrigated agricultural land. Simultaneously, on an annual basis the Dutch population is increasing at a rate of 329 people a day. A similar increase in the population density is also occurring in the Flemish Region of Belgium, a neighbor of the Netherlands. The two countries, with high and increasing population density and small agricultural area, have adopted intensive methods of agriculture. Massive use of organic and inorganic fertilizer, and a large numbers of livestock in a small area, have become necessary trends for the survival farmers in these countries.

The issue of environmental degradation, due to agricultural practices, will increasingly be a source of conflict between three major actors groups in the 'environment and agricultural' governmental

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organizations and policy makers, the farmers and the Environmental Non-Governmental Organizations (later will be abbreviated as ENGOs). This thesis is intended to identify the roles of ENGOs in conflict management between environmental concerns and agricultural practices as they relate to agricultural emissions, particularly nitrate emissions (*'nitrate conflict'*), in the Netherlands and Flemish Region of Belgium.

B. Environment and Agriculture

Today, threats to the environment are substantial and continue to increase. The environmental quality of our planet is being degraded every day by many human activities. Uncontrolled agricultural activities are a major, but not the only, source of agents, which are considered to 'endanger the environment'. In most instances agrculture acts as a 'diffuse' source, i.e. relatively low rates of loss or emissions take place from large areas of land into waters or the atmosphere[1].

In countries using intensive agricultural practices, the usage of nutrients in agriculture, mainly Nitrogen (N) and Phosphorus (P) is responsible for significant transfers of a wide range of other materials which also act as pollutants to the environment. This research is focusing on the harmful effect of uncontrolled N agriculture emissions on the environmental quality in two countries, the Netherlands, and Flemish Region of Belgium.

C. Nitrate Emission Problem

Nutrients, especially N and P, are essential for all living systems and are necessary to achieve high production levels that are central to intensive agricultural systems. However, N and P are also the most common nutrient pollutants associated with agriculture. There is evidence that the greatly increased use of N fertilizer in agriculture has also contributed to greenhouse gas emissions and acidifications. It is generally accepted that over-use of nutrients in agriculture has increased the nutrient contents in both surface and ground water. The following table illustrates the environmental concerns derived from the agricultural use of N.

In intensive agricultural countries, such as the Netherlands and Belgium, these environmental concerns are greater than in the extensive agricultural countries. Thus, the possibility of nitrate conflict occurring is greater in the Netherlands and Belgium than in an extensive agricultural country, for example Denmark or Austria. The threat of nitrate emissions polluting the environment has become such a concern that the European Union decided to enact an European Union Directive (EUD) on Nitrate in water quality, EUD no. 91/676. The main emphasis in the Nitrate EUD is on Nitrogen. The implementation of this EUD is creating a conflict of interests between major actors throughout the EU, especially in the intensive agricultural countries of the Netherlands and Belgium. Thus, this research will document

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1 De Clerq, P.(ed), (2001), '*Nutrient Management in Legislation in European Countries*', Department of Soil Management and Soil Care, Faculty of Agricultural and Applied Biological Sciences, Wageningen University, Wageningen Press, The Netherlands, pg. 4.

Key environmental concerns derived from agriculture, related to N

Environmental concerns related to N	**Environmental and other impacts**	**Scale of agricultural contribution**	**On-farm sources**	**Scale of impact**
Nitrate ($N0_3^-$)	Water quality -eutrophication -heatlh Economic -loss to farmers -cost of removal	Major Source	Intensively managed land (inputs from fertilizer, manure, slurry, legumes and feeds)	Local: on-farm surface waters Regional: surface waters; catchment; aquifers National/ international: maritime waters
Nitrite($N0_2^-$)	Water Quality -fish stocks and health	Major source	Managed land	Local: on-farm surface waters Regional: surface waters and wells
Ammonia (NH_3)	"Acid rain" -acidification of soils -eutrophicaiton of natural systems Direct toxicity	Major source (>85%)	Fertilizers (urea), Excreta, manure, and slurry	Local: 'on-farm' deposition Regional: deposition on natural ecosystem National/ international: cross boundry transfer of NH_3 and deposition
Environmental concerns related to N	**Environmental and other impacts**	**Scale of agricultural contribution**	**On-farm sources**	**Scale of impact**
Nitrious Oxide (N_2O)	Greenhouse gas -global warming Ozone interaction	Substantial (likely to increase in importance as other sources decrease)	N fertilizers, excreta	Global
Nitric Oxide (N0)	Tropospheric ozone precursor	'minor'?	Combustion, fertilizers, manure and slurry	Global

Source: adapted from P.De Clerq (2001), "Nutrient Management Legislation in European Countries" Department of Soil Management and Soil Care, Faculty of Agricultural and Applied Biological Sciences, Wageningen Press, Wageningen, pg.5.

the nitrate conflict and the major actors within the conflict, in the Netherlands and the Flemish Region of Belgium during 1990-2000, focusing on the roles of ENGOs in the nitrate conflict management.

D. ENGOs (Environmental Non-Governmental Organizations)

Internationally, the roles of NGOs in general are acknowledged in the Rio Convention of 1992. The convention underlines the importance of the role of NGOs in democracy. According to the Rio Convention[2], 'NGOs play a vital role in the shaping and implementation of participatory democracy. Their credibility lies in the responsible and constructive role they play in the society'. This has been particularly true with respect to the development of environmental law and policy. Historically, NGOs have been especially active in the United States, Canada and western European countries that have political traditions, which encourage citizen participation in public policy matters[3]. Another statement that clearly states the importance of NGOs in the civil society is in Agenda 21. The expected roles of NGO, as quoted from paragraph 3.7 of the United Nations Conference on Environment & Development are:

> *3.7. Sustainable development must be achieved at every level of society. Peoples' organizations, women's groups and* ***non-governmental organizations*** *are important sources of innovation and action at the local level and have a strong interest and proven ability to promote sustainable livelihoods. Governments, in cooperation with appropriate international and non-governmental organizations, should support a community-driven approach to sustainability, which would include, inter alia:*
>
> *(a) Empowering women through full participation in decision-making;*
>
> *(b) Respecting the cultural integrity and the rights of indigenous people and their communities;*
>
> *(c) Promoting or establishing grass-roots mechanisms to allow for the sharing of experience and knowledge between communities;*
>
> *(d) Giving communities a large measure of participation in the sustainable management and protection of the environment in order to enhance their productive capacity;*
>
> *(e) Establishing a network of community-based learning centres for capacity-building and sustainable development.*
>
> *(f) Management-related activities*

According to these criteria, environmental NGOs have an important role in

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2 Report of the United Nations Conference on Environment and Development, Rio de Janiero, 3-14 June 1992.

3 Scott, Preston T. and Jon Martin Trolldalen, (2002) '*International Environmental Conflict Resolution: Moving Beyond Rio'*, World Foundation for Environment and Development-WEFD, http://www.wfed.org/resources/reports/article3.htm, May 15th

achieving sustainable development, which also includes the management of conflict.

E. Political Landscape in the Environmental and Agricultural Sector of the Netherlands and Flanders, Belgium

1. The Netherlands

The Netherlands is a constitutional monarchy. The monarch is the formal head of state but has limited powers. The ministers are responsible to the Parliament including activities of the head of state and of certain members of the royal family. The legal and administrative structure of the country is based on the "*trias politica"*: the unit of the government, parliament and the courts - successively responsible for governance, legislature and independent jurisdiction.

The Parliament formally named the States General (*Staten-Generaal*), consists of an upper and a lower house: the First Chamber (*Eerste Kamer*) and the Second Chamber (*Tweede Kamer*). The major legislative power is in the hands of the Second Chamber. It has 150 members and is directly elected every four years. Members of Parliament belong to parliamentary political parties. The main parliamentary parties at the moment are the PvdA (*Partij van de Arbeid*), the Dutch labour party; the VVD (*Volkspartij voor Vrijheid en Democratie*), a party of the liberal movement; the CDA (*Christen Democratisch Appel*), formed by the merger of a number of political parties of various Christian denominations; D66 (*Democrater 66*), a left-liberal party established in 1966 with the major aim the modernisation of political establishment; and *Groen Link*s (literally Green Left), which was formed by the merger of various small left-wing parties. As no one single party ever achieves a majority in Parliament the government is always a coalition. The governing coalition consists of members of the PvdA, the VVD en D66. Wim Kok is the Prime Minister of the Netherlands. At the time of the writing, a new election on the way, due to the previous governing coalition. Both the Parliament and the government reside in The Hague. Amsterdam is the official capital of the Netherlands[4].

The central government makes decisions on national issues. Provincial and municipal councils have their own decision-making power on regional and local levels. National policy naturally restricts the powers of local and regional governments. The principle however is to keep decision-making powers as close as possible to the local level, promoting public participation democracy. Living space (housing), business (economic affairs), infrastructure and flood protection (transport and public works), space for farming (agriculture), nature (habitat conservation) and recreational activities (recreation), are all aspects that have to be considered. In a densely populated country as the Netherlands it is difficult to fulfil all demands related to those areas. All relevant conditions and interests need to be weighed and the procedures take time.

The ministry, which is responsible for environmental affairs in the Netherlands, is the VROM ministry. The name VROM is the

4 http://www.vrom.nl/international/**,** 29 November, 2002.

abbreviation of the Dutch name for housing, land-use planning and environmental management. In making the final decision for the environment and agricultural sector, the VROM ministry is collaborating with the ministry of The Ministry of Agriculture, Nature Management and Fisheries[5].

2. Flemish Region, Belgium

Belgium gained its independence in 1830. In recent years, the country has rapidly evolved, via four sets of institutional reforms (in 1970, 1980, 1988-89 and 1993) into an efficient federal structure. So it is that today, for the first time, the first article of the Belgian Constitution states "Belgium is a Federal State which consists of communities and regions"[6].

In 1993, Belgium became a federal state. Belgium is now composed of a federal level and two kinds of sub-national entities: three Regions (the Flemish, Walloon and Brussels Capital Region), and three Communities (the Flemish, French-speaking and German-speaking community). The Belgian federal government retains authority over several important policy domains such as foreign affairs, finance, social security and justice. The Communities are the result of the Flemish demand for cultural autonomy. The Communities are authorized to legislate for cultural policy and person related manners, such as education and welfare policy. The Regions, on the other hand, result from the Walloon pursuit of economic autonomy, and are therefore competent to decide on economy-related policy domains, including important parts of environmental policy[7]. Because a large part of the environmental matters is allocated to the regions by the Constitution, each regional government has a minister with a competence for environmental affairs. The Flemish parliament consists of 7 parties, the extreme right Flemish block, VLD (liberal party), Spirit, C.V.P (Christian Democrats), SP-A (socialist party) and the green party 'Agalev' (translated as 'living differently'). Out of these 7 parties, only 4 of them are in office in the meantime, which are the Green Party, SP-A, Spirit and VLD Liberal. In Flemish area (Flanders), the minister for environmental affairs is currently also the minister for agricultural affairs. Mvr. Verra Dua, from the Green party is the minister for environment and agricultural affairs in Flanders. This is the first time in Flanders since 1993, where there is only one minister for the two sectors.

Aside from the minister of environment and agricultural affairs, in Flanders, there is also the Vlamse milieu and Natuur Raad (MINA-Raad) which is the Environmental-Nature Advisory Council to the parliament. Mina-raad is an advisory council for environmental policy of the Flemish

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5 Interview with Mr. E.E.Biewinga, the Ministry of The Ministry of Agriculture, Nature Management and Fisheries, 14 November, 2002, Den Haag.

6 http://belgium.fgov.be/en_index.htm, 29 November, 2002

7 Bursens, Peter, (1997), "Environmental Interest Representation in Belgium and the EU", *Environmental Politics journal*, Vol.6, No.4, London, pp.51-75

government, which is one of the parts of the Federal government in Belgium. The council gives advice on every issue that is being brought on the environmental policy. The council is formed by the representatives of the stakeholders in the society, among others; are the environmental NGOs (BBL and Natuur punt), the social-economic groups (3 workers representatives and 3 employers representatives also the Boerenbond), and 5 members of the scientific worlds and 2 members of the local authorities, the communities and the provinces. And it also has 4 representatives of other advisory councils that are working for other groups of users of the rural areas, like hunters, fishermen and forest managers. Members of Mina-Raad give advise on every new piece of legislation, or new draft plan, which is related with the environment. For some issues, the government has the duty to ask for the council's advise, but for some other it is not obligatory. But if there is some *dossiers* that are interesting for the council, but not being asked for advise by the government, the council can still give advise for the government.

F. Major Actors in Nitrate Conflict

1. Farmers' Association in Netherlands and Flanders,Belgium

In the Netherlands and Flanders, Belgium, the writer encountered with two biggest farmers associations in the countries. They are the LTO for the Netherlands, and the Boerenbond in Flanders. Both of them have strong influence to the farmers in their own areas, thus, in this thesis these are farmers associations that will be representations of the farmers.

a. LTO Nederland

LTO Nederland established since 1880 in the 19th century, from the general feelings that farmers needed to have an opinion for their field (in the policy making, their voice in regulation, etc). Thus, to succeed, they need to organize themselves. Other NGOs were founded, and mostly they were organized by religions. They were catholic farmers' union, Protestant farmers' union and neutral farmers' union. Finally for last 20-30 years, they have come together. Nowadays, there is one big farmers' union/association in the Netherlands, and there are few farmers' unions. These small farmer union small number of members and more controversial than the LTO. The biggest one is the LTO. LTO is located all over the Netherlands, and organized by regions. The mission of the LTO is the development of economical behavior, social welfare of the farmers and family.

Roles of the LTO in the environment-agricultural sector are:

- Influencing the government and governmental policies (as part of their responsibility to their members) on the farmer's rights and obligations, and explaining to the government the farmers' desire and interests
- Informing members the concern of the environment. It is an important role to the members the state of the environment while also trying to sustain agriculture.

b. The Boerenbond, Flanders Belgium

Boerenbond was founded in 1895 by a priest, on a big crisis in agriculture, when farmers came together and decided to buy their seeds together, to finance their economical co-operation. The original idea of the Boerenbond was to form an economical co-operation, and afterwards it expanded to other things, as a multipurpose organization, as it has developed now.

The Boerenbond Group is a professional organization, which has about 50 thousands member farmers. It consists of a bank the Kassa (KBC), and the Aveve, the corporation that buy seeds, some cultural organizations and several other smaller companies.

Nowadays, the economical part of the Boerenbond Group left the Boerenbond as an independent, they had given the Boerenbond 'stocks'/share and leave Boerenbond to focus on the farmers needs.

Tasks of the Boerenbond:

- Social organization for members
- Professional organization for farm managers
- Rural movement for the inhabitants of the country side
- Part of the Boerenbond 'group'

Politically seen, Boerenbond is in a very good position, because they have a close relation with the Christian Democrats party. Since 1991 the Christian Democrats party was thrown out from the governmental position to the opposition position. Although the Boerenbond still has strong ties with the current government, their influence has lessened since the last election.

2. ENGOs

a. The Netherlands

One of the objectives of this research is to determine the variety of roles of Dutch and Flanders ENGOs in environmental conflict management. In the Netherlands, after the Second World War, mutual influences on the socio-economic and cultural patterns of development of the various countries in the world have increased tremendously[8], this also influenced the flourishing of ENGOs in the Netherlands. In 'the Making of the New Environmental Consciousness' the development of Dutch environmentalism is distinguished to four phases after 1960, namely:

- **Phase I (1962-68):** the gradual rise of the new environmentalism, where the Dutch industry grew steadily in according to the market demand at that time. Many industries such as Phillips, Unilever and AKZO were growing vastly. Although environment was not considered an issue in that time, several Dutch voices could already be heard warning about environmental disasters if present policies were continued. For example, ad hoc actions, such as protest against the licensing to open a new petrochemical factory 'Progil' near Amsterdam in 1968, and actions to prevent the closure of the Oosterschelde, one of the main waterways in the southern part of the Netherlands.
- **Phase II (1969-73):** the rise of public concern for the environment. In this phase, public concern for environmental issues grew quickly, reaching its

8 Ibid, pg. 121.

culmination in the early 1970's. The more environmentalists brought cases of environmental pollution to public attention, the more people became aware of the seriousness of the problem. Media has played a big role in this phase. Depending on differences in political strategy, three major wings can be distinguished among the various national environmental groups, namely those who: (1) put major emphasis on influencing government policy, (2) focused on mobilizing the public, (3) primarily developed exemplary alternative strategies. These three wings continued to exist to this day.

- **Phase III (1974-1980):** During this period a number of tendencies in 1960s were institutionalized. For example, the general secularization and depolarization of Dutch society and a continuation of participation in action-groups, connected to environmentalism. Socio-economic stagnation clearly began to make a visible impact on Dutch society, which caused a mentality change of the people. The country has to faced the growing unemployment, decreasing income from taxes and increase expenditure of social-welfare. In this phase, changing knowledge interests within the environmental groups emerged. Instead of the general discussions about environmental pollution characteristic of the previous phase, the focus had now shifted towards more directly political themes, such as how environmental problems were caused and how they could be solved.
- **Phase IV (1981-1989):** the era of no-nonsense. Various environmental groups revised their knowledge interests and political strategies in the light of the socio-economic development, where political bodies' roles in the execution of environmental policies had shifted. The relationship between the government and environmental groups was also strengthened. Some environmental groups tended to become more institutionalized and develop gradually form an action group into a normal interest group. Hence, there is a tendency towards pragmatism. This means that environmental groups have become reluctant to build their activities around very idealistic and deterministic principles.
- **Phase V (1990-2000):** in this phase, the state and market were reoriented in the ecological modernization theory. They have become closer in working together in managing the environment. The market do not deny the indispensability of the state in environmental management, but envisage a different steering role for the state. Hence, with this reorientation, the environmental movements will shift from that of a critical commentator outside societal developments to that of a critical –and still independent- participant in developments aimed at an ecological transformation[9].

9 Mol, A.P.J, (1995),'*The Refinement of Production: Ecological modernization theory and the Chemical Industry*', Ph.D. Thesis, Wageningen University, Wageningen, pg.42

As seen in the different phases above, time have changes the position and roles ENGOs in the environmental movement, from being an outside commentator in societal development to becoming an actor itself in the development. This would also explain their roles in the nitrate conflict management.

The linkages between these phases with the types of NGOs mentioned above are the types of role they would take in environmental conflict. For example, a public interest model NGOs will take a traditional stand in environmental conflict, such as the Sierra Club will play along as an 'informer' and uses traditional tactics, while participatory pressure group, such as Earth First! reacts radically to conflict, emphasizes participatory action, sub-cultural structures and disruptive protest and most possibly advocating the conflict through judiciary or protest measures. The other type, the professional protest organization, such as Friends of the Earth or Greenpeace who have professional activism and mobilization of financial resources with the use of confrontational tactics alongside conventional ones, like media pressures and negotiation in managing environmental conflict as well as direct protest on the issue. Differently, the fourth type, the participatory protest organization such as the World Wildlife Fund will involves rank-and-file members and supporters but uses conventional pressure techniques, with media and selling 'education' products.

The existing ENGOs in the Netherlands, which are involved in the nitrate conflict management, are going to be explored in detail in the analysis. Due to the time limitation of the research, this thesis will only discuss on three ENGOs in the Netherlands. They are: the Stichting Natuur Millieu, the Brabantse Millieu Federatie and the Waterpakt. Discussion on their typology, characteristics and their roles in the nitrate conflict management will be presented in the following chapter 5.

b. ENGOs in Flanders, Belgium

Due to the limited number of English language publications of the subject, most of the data on ENGOs in Flanders, Belgium are primary data collected from the interviews. The phases that we have seen in the Dutch environmentalism might also be seen in Belgium, with the delay of one or two years after the Dutch's phases, considering the Dutch are the pioneer in environmental development in Europe.

The number of Belgian environmental interest groups is estimated at approximately 150[10]. These include nationally, sub-nationally and locally organized associations. The three Belgian Regions have their own peak of organization, covering environmental protection and nature protection associations. The Flemish umbrella association 'Bond Beter Leefmilieu-Vlaanderen' (BBL) was created in 1976. BBL now covers more than 100 groups, which all exclusively operate within the Flemish territory, except for

10 Bursens, Peter, (2001) "Environmental Interest Representation in Belgium and the EU: Professionalization and Division of Labour within a Multi-Level Governance Setting", *Journal of Environmental Politics*, Vol.6, No.4, Frank Cass, London, pg. 51-75.

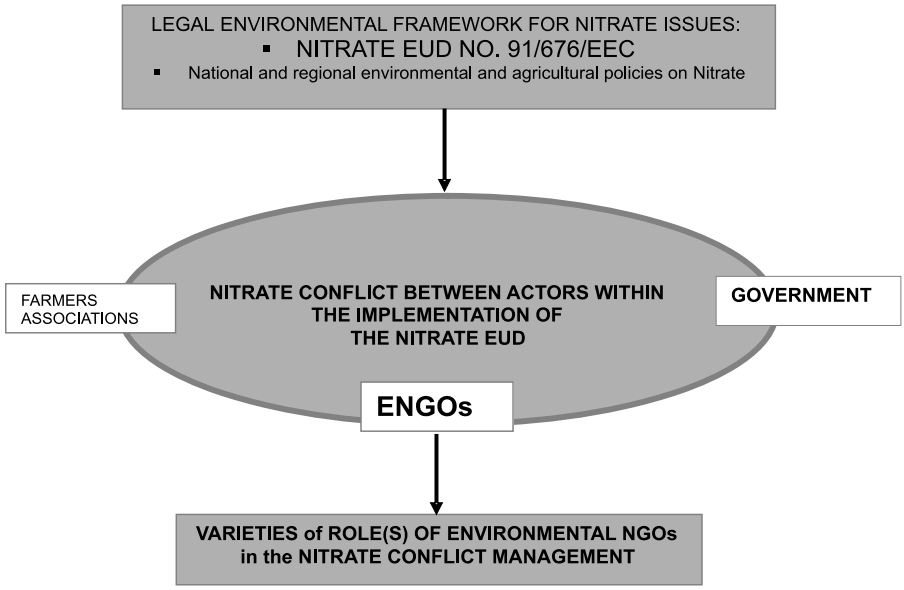
Greenpeace Belgium.

All associations have a totally free membership in common: one is free to join any group, or to join no group at all[11]. This applies to BBL, consisting of member-associations, and to WWF and Greenpeace, both having individual as members.

In this research, aside from BBL, there are two other ENGOs in Flanders that will be discussed; they are the Natuur Punt, and VELT.

G. Analytical Framework

The following figure is the analytical framework compiled to picture the research:



The background of this study is the legal environmental framework for nitrate issues in the study areas, which includes the Nitrate EUD and the national and regional environment and agricultural policies on Nitrate. In this study, we first will look at the nitrate conflicts emerged on the Nitrate EUD implementation. Within the conflict, we will identify and highlight the interaction of three major actors, the government, farmer's associations and especially the ENGOs as the center concern of this study. Afterwards, we will identify the varieties of roles of the ENGOs in the nitrate conflict management.

H. European Union Directive on Nitrate no. 91/676

Intensive farming methods are causing many environmental problems. One example is the applying livestock manure to the soil, which lead to pollution of water by nitrates. The use of fertilizers containing nitrates is one of the main causes of pollution affect-

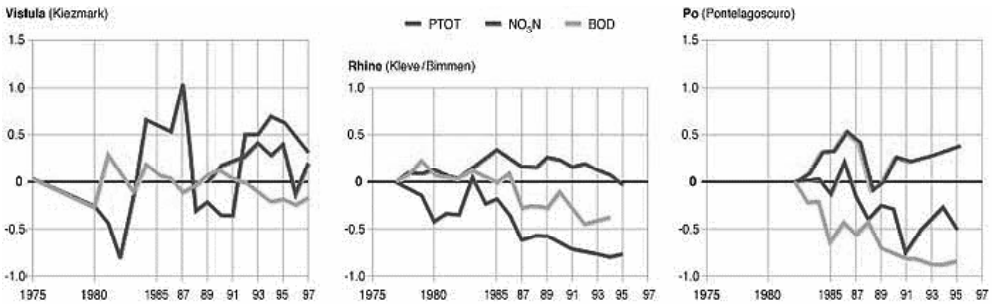
11 Ibid, pg.61.

ing the community's waters. Agriculture and environmental policies are made both at the European Union (EU) level and in the 15 member nations. The EU has three branches of government: A directly elected European Parliament; an executive branch, the European Commission; and a judicial branch. Directives that are issued by the European Commission have to be implemented by Member States. According to the subsidiary principle implementation of EU Directives is not the task of the EU but of the national, regional or local government in the Member States. National governments are free to adopt stricter policies than those imposed by the EU[12].

Several European countries with a high concentration of livestock have their own manure regulations. In all countries, the quality of drinking water and surface water is an important policy issue, particularly with respect of the nitrogen levels. The severity of the nitrate problem in European countries varies widely due to natural conditions, agricultural practices and farm structure[13].

Graphs show declining levels of phosphorus (PTOT) and organic matter (BOD) in European rivers, with no clear trend for nitrate (NO3N). Values are relative to 1975 (1975=0)

One particular EU directive that is of central concern to this research is the EU Directive no. 91/676. Directive 91/676 aims to reduce water pollution caused or induced by nitrates from agricultural sources[14]. The directive is clearly underlining the protection of waters against pollution caused by nitrates from agricultural sources. Proceeded by the directive of EU, no. 75/440/EEC (surface water quality), which was amanded by Directive 79/869/EEC and Council Directive no. 80/778/EEC[15] (quality water intended for human consumption), this EU Directive no. 91/979 is a relatively short directive, with 13 articles and V annexes. In its short and comprised form, it tries to cover all the possible damages concerning the content of nitrate in waters in the areas of Member States.



Source: EEA-ETC/IW 1996, taken from http://www.unep.org/geo2000/english/0078.htm August, 5, 2002

12 Wossink, Ada, and Geoff Benson, (1999), Seminar paper of Southern Extension Public Affairs Committee, '*Animal Agriculture and the Environment: Experiences from Northern Europe'*, Florida, pg.2.

13 ibid. pg. 2

14 Jans, Jan H.,(1995),"*European Environmental Law"*, Kluwer Law International, Den Haag, pg. 307-309.

15 The Council Directive no. 80/778/EEC on the quality of water intended for human consumption, includes 62 standards to protect human health, and permitted nitrate level in water is 50mg/liter.

According to this Directive, Member States are required to have identified the waters which were affected (or could be affected) by nitrate pollution before the end of 1993 (Article 3 (1)). The criteria for this are set out in Annex I, though the Member States are allowed considerable latitude in whether or not to designate specific waters, as quoted from the Directive no. 91/676/ EEC, Article 3 (1):

> *"Waters affected by pollution and waters which could be affected by pollution if action pursuant Article 5 is not taken shall be identified by the Member States in accordance with the criteria set out in Annex 1."*

According to Annex 1 of the Nitrate EUD, the criteria to identify the water, among others are:

- whether the surface freshwater for drinking water, contain or could contain more than the concentration laid down in accordance with Directive 74/440/ EEC,
- whether ground waters contain more than 50mg/l nitrates or could contain more 50mg/l nitrates, and
- whether natural freshwater lakes which are found to be eutrophic (a state where nutrient are found abundantly in the water, causing extensive algae blooming in the water, which in the end will cause decreasing the amount of oxygen in the water and damaging the water's bio-diversity) or in the near future may become euthrophic .

These situations presumably will take place if action pursuant to the establishment of 'National Action Programs'[16] in respect of the vulnerable zones. These action programs are compiled and organized by Member States, apply in their own territories, conduct a review (and if necessary revisions) of their action programs- in every 4 years. The Commission should be inform by the Member States if there is changes in the action programs.

Meanwhile, Article 3 (2) provides that Member States must designate as vulnerable zones all known areas of land in their territories to which drain into the waters identified according to paragraph 1 (as already quoted above, Directive no. 91/676/EEC, Article 3 (1)). Once these zones have been designated, Member States must establish action programs consisting of certain mandatory measures (Article 5 in conjunction with Annex III). The limit of the application of livestock manure is, for example, set at 170kg of nitrate per hectare.

The term '*vulnerable zones'* itself, is explained in the paragraphs in Article 3. Summarizing from those paragraphs, the meanings of 'vulnerable zones' are:

(1) waters affected by pollution and waters which could be affected by pollution if action pursuant Article 5 is not taken;
(2) areas designated by the Member State in their territories which act as drain(s) into the waters identified according to (1) and which contribute to the pollution;
(3) any waters identified by a Member State in accordance to (1) are affected

16 Article 5 of the Nitrate EUD no.91/676/EEC

by pollution from waters from another Member States draining directly of indirectly in to them,

(4) other areas designated by the Member States, either revised or added areas as vulnerable zones in at least every four years with the notification to the Commission six months after this revised or added designation.

This explains that vulnerable zones are designated by Members States with the direction from the Commission, which is not very specified (see annex 1). Member States have their own liberty whether to designate or not designate an area as vulnerable zone. This can be a potential source of conflict. Each Member State can argue based on the differences of soil, or water, or climate to protect their interests. For example, in the Netherlands, farmers are trying to get their farmland identified as a 'clay soil' type[17], so that they will get higher standards of nitrate emission, according to their national nitrate regulation. If many farmers succeed in doing this, this would mean that the Netherlands will have higher nitrate emission standard than any other Member States, hence a potential conflict of interest between the Member States.

Outside the vulnerable zones, the general obligation contained in Article 4 applies, which means that the Member States were supposed to have established in a 'code of good agricultural practice', to be implemented by farmers on a voluntary basis, before the end of 1993. The item of which should be concluded in such a code should is stated by the Directive in Annex II. The directive provides for a special consultation procedure in the event of trans-frontier pollution.

According to Annex II of this Directive, code of good agricultural practice aims to reduce pollution by nitrates and take accounts of conditions in different regions of the Community when these conditions are occurring : (a) periods when land application of fertilizer is inappropriate, for example in the winter; (b) the land application of fertilizer to steeply sloping ground, which needs great care because of the position of the ground that run-offs could easily occurring; (c) the land application of fertilizer to water-saturated, flooded, frozen or snow-covered ground, (d) the conditions for land application of fertilizer near water courses, (e) the capacity and construction of storage vessels for livestock manure, including measures to prevent water pollution by run-off and seepage into the groundwater and surface water of liquids containing livestock manure and effluents from stored plant materials such as silage, (f) procedures for the land application, including rate and uniformity of spreading, of both chemical fertilizer and livestock manure, that will maintain nutrient losses to water at an acceptable level. It is also suggested in this Annex, that Member States are urged to include their code(s) of good agricultural practices, among others are: (1) land management, such as crop rotation system and land area proportioned to permanent and annual tillage crops, (2) minimum quantity of vegetation cover

17 Interview with Jerome Reemers, SNM, Utrecht, NL, August 22, 2002.

during the rainy periods to take up nitrogen from the soil, (3) establishment of fertilizer plans by farmers which also means keeping records of the fertilizer use, (4) prevention of water pollution from run-off and downward water movement beyond the reach of crop roots in irrigation system.

This Directive, especially in its Annex II, is taking major care of the agricultural practice, even outside of the vulnerable zones. It is requiring the Member States to establish a code or codes of good agricultural practices, for farmers to farm, in order to prevent nitrate pollution. The obedience of farmers is greatly needed, aside from a strong control from their national agricultural government. For farmers themselves, if they did not get prior education of the importance of the pollution abatement, these codes can be seen as a tightening rope to them to conduct their agricultural freedom.

Moreover, according to this Directive, the national action program must be seen as a strengthening of the codes mentioned above in setting compulsory rules for handling nutrients. In particular, the national programs must address maximum land application rates of minerals from manure. The final EU objective is that this application should not exceed 170kg N per hectare. However, member states may establish less restrictive amounts as long as this does not result in violating the 50mg nitrate per liter objective in the Directive[18].

With the strictness of this Directive, it is unlikely that all the action programs will be fully implemented by the current deadline of 2003. Therefore, it should be regarded as an indication of what is expected in the long run. Moreover, there are difficulties in the implementation stages of this Directive. As already understood, some countries feel this Directive particularly harder than other countries, especially countries with strong farming tradition, such as the Netherlands and Belgium. The EU acknowledges this problem by stating that the implementation of this directive is severely behind schedule.

> *"The Nitrates directive seeks to prevent the pollution of waters by nitrates from agricultural sources by requiring Member States to place mandatory restrictions on agricultural practices where these contribute to the nitrate pollution of waters. Implementation of this directive is severely behind schedule[19]."*

I. Discussion on the Similarity and Differences of the Nitrate Policies in the Netherlands and Flanders, Belgium

Some **similarities** of the nitrate policies between the two areas are:

- Both environmental policies of the two countries, the Netherlands and Flanders, Belgium, are in submission to the nitrate EUD. All of their standards on nitrate are subject to the same Directive.
- Nitrate policies on both countries started to be developed in the 1990's, the period of which the Nitrate EUD

18 Op-cit. pg. 3.

19 Taken from European Union Web Site, http://europa.eu.int/comm/environment/water/water-nitrates/directiv.html, 17 August, 02.

was enacted. Before the existence of the Nitrate EUD, there were little signs of the development or even enactment on nitrate policies in both countries. Thus, the Nitrate EUD had stimulated the development of nitrate policy and management in both countries.

- Although there are differences in the political power landscape, --in Flanders there is only one minister for the environment and agricultural affairs, while in the Netherlands there are two separate ministers and ministries, in reality these policy makers from environment and agricultural sectors work together in achieving the goals of the nitrate EUD. The final say on the enactment of nitrate policies is the results of collaboration, between the policy makers in environmental and agricultural sectors.

Furthermore, the differences of the nitrate policies between the two areas are:

- Designation of the vulnerable zones. The Netherlands, from the very beginning, in the first phase of their manure, minerals and ammonia policy development, had designate all areas in the Netherlands as vulnerable zones. Where as in Flanders, Belgium, the opposite had happened. In the first decade of the implementation of the nitrate directive (1990-2000), only 17% of the Flanders area was designated vulnerable zones, but next year, in the year of 2003, the Flanders government had decided to make more vulnerable zones, which is 47% of their area. The differences in designation of the vulnerable zones, might cause a big difference in the implementation of the Nitrate EUD. As understood, many rules and regulations are specifically directed to the vulnerable zones, hence, when a country has less vulnerable areas from the other countries, this might mean that the Nitrate EUD will have less effect on the particular country.
- The different key instruments chosen by the two countries to implement the Nitrate EUD. The Netherlands is concentrating on the MINAS system, where the farmers records exactly how much nitrogen and phosphate enter his farm (are inputted) and how much leaves the farm (are outputted). The difference between mineral inputs and outputs is the farm's mineral loss, or surplus, which leaches to the environment. Each year, a farmer must complete a mineral return stating his mineral surplus. Meanwhile, in Flanders, the key instrument for nitrate EUD implementation is 'vermesting' (the overloading ecological processes and cycles through an excess of nutrients in the environment) in the Mina-Plan 2000. Each instrument has their own complexities that have to be tackled by the major actors in the sector to implement it.
- Support (financial) for the farmers. In the Netherlands, even in the third phase of the nutrient policy development, in the MINAS system, notably, there is no financial assistance offered to farmers to help defray the cost compliance. The farmers must bear the full cost. As

already stated in the previous section, this is a very hard fact for the farmers in this country, aside from cutting down their mineral and manure use, they also have to adopt this new and complicated accounting system of MINAS. These hardships if not being appreciated by the policy makers, might be resulting in the failure of implementation in the end. Meanwhile, in Flanders, Belgium, the government is giving incentives for farmers in the vulnerable zones, who are using fewer nutrients than the standards. Other incentives are also given for farmers who are interested in changing their way of farming, from conventional farming to organic farming. In the first five years those farmers will get subsidies from the government. These incentives might push the farmers to be more motivated in implementing the nitrate management and the Nitrate EUD.

Aside from the similarities and differences on the nitrate policies in the two study areas, there are more factors to be considered in implementing the Nitrate EUD, including in the nitrate conflict management in the Nitrate EUD implementation.

J. Roles of ENGOs in Nitrate Conflict Management

1. Roles of ENGOs in the Netherlands' Nitrate Conflict Management

From the collected data at the fieldwork, the major stakeholders in the Netherlands are satisfied with the roles of ENGOs in the nitrate conflict management. The farmers association, although denying any formal contact with the ENGOs within the last 2 years, are calling them defenders of the environment, and their partner in work.

In addition, the ministry of environment is expressing the same feeling about the existence of ENGOs in the environmental-agricultural field in the Netherlands. As quoted from Mr. Molenaar, the Ministry of Environment:

> *"We do not complain about the existence of ENGOs in the Netherlands. Sometimes we are even glad that they are around, they can say things that us, the government can not say. "*

Thus, the ENGOs in the Netherlands play a great part in the nitrate conflict management, as protectors of the environment, they voice their opinions in campaigns and debates, and have even filed legal cases when necessary. The different roles played by the ENGOs in the nitrate conflict management are:

1. playing a critical part in the environmental and agricultural problem in the Netherlands, as a defender of the environment, for example in the case of the civil procedure in 1998, where the SNM and Waterpakt went to court to file a case against the state on the implementation of Nitrate EUD.
2. serving as an information source for the public and the media about nitrate problems, and presenting the solutions for instance, each of the ENGOs discussed in this research (SNM, BMF and Waterpakt) has their own publication (printed and electronic media) which aim to inform the public on nitrate problems and solutions.

3. working together with policy makers and other NGOs on finding or realizing solutions. This takes place formally and informally, at the negotiation table or in public debates. The ENGOs are always trying to get their points across to the other major actors.
4. forming strong coalitions with other organizations to make their voices stronger; for example, the BMF is a federation of local environmental groups, while the SNM is an umbrella organization for environmental groups in the Netherlands,
5. Maintaining close contact with ministers, members of parliament and other politicians, government officials, journalists, scientists, and key figures from the business and financial communities and from numerous voluntary, trade and professional organizations, this can be seen in the efforts of environmental groups in lobbying major actors in the environmental-agricultural sector on the nitrate issues.
6. conducting research, entering into consultations and dialogue, providing advice, lobbying, generating publicity . The diverse research conducted by the ENGOs on the nitrate conflict in water quality can be seen in their publications/web sites (SNM: www.snm.nl and Waterpakt: www.waterpakt.nl).
7. taking legal action, often in combination with the conventional dialogue and lobby groups, for example in the court action of 1998, where the ENGOs are filing the case against the Netherlands on the implementation of Nitrate EUD.

These roles, match the typology of the 'professional protest organization' since they maximize resource mobilization and combine different strategies of conventional and confrontational campaigns.

2. Roles of ENGOs in Flanders, Belgium in the Nitrate Conflict

From the data collected in the fieldwork, ENGOs have very important roles in nitrate conflict management. First of all, as defenders of the environment, ENGOs are always the first one to protect the environment. This was proven by BBL and its member campaigning and delivering publication on the danger of nitrate leakages from agriculture. But as time has gone on the nitrate problems have become very technical and it is very difficult for ENGOs to communicate to the public.

At this point the negotiations with the government and the farmers' association began. Discussion after discussion was organized between these stakeholders (the ENGOs, the farmers' association and the government), mainly in the Mina-Raad, where important parts of the society gather together to give advice to the government. As mentioned before, even the discussions in the Mina-Raad often lead to a dead end, since both the ENGOs and the farmers' association sticks very closely to their point of view. Out of desperation from the talks, the ENGOs finally wrote the complaint letter to the EC demanding that EC the take action against Belgium (especially the Flanders region) to comply to the nitrate EUD.

Hence, the Flanders ENGOs roles in

the nitrate conflict management are:

1. campaigning and raising awareness on the nitrate problems. Each Flemish ENGO discussed in this thesis, has their own means of publication, printed and electronic media, which are tools in campaigns and awareness raising for their members as well as the public on the nitrate problems and its solutions.
2. the strong wheel in protecting the environment in public debate/ discussion, this has been proven in the long and winding negotiation process in the Flanders area where the ENGOs stood firmly on their principles of defending the environment.
3. when the debates did not work, the ENGOs in Flanders decided to take the nitrate issues to a higher level, in this case the European Committee, to take actions on Flanders, Belgium.
4. working together with the policy makers and other NGOs on finding or realizing solutions. This can be seen in BBL as an umbrella organization with over 120 member groups, among other being Natuurpunt and VELT.
5. providing a strong coalition with similar organizations to make their voices stronger, such as Natuurpunt being associated with the Birdlife International for a stronger voice, and the BBL is making alliances with the media, and politicians, as a networking and lobbying way to be heard.
6. maintaining close contacts with ministers, members of parliament and other politicians, government officials, journalists, scientists, and key figures from the business and financial communities and from numerous voluntary, trade and professional organizations.
7. conducting research, entering into consultations and dialogue, providing advice, lobbying, generating publicity , these actions can be seen on their web sites, for example, the BBL at www.bondbeterleefmilieu.be, Natuurpunt at www.natuurpunt.be and VELT at www.velt.be.

These roles match the ENGO typology as the 'professional protest organization', where the ENGOs combine professional activism with the use of confrontational tactics alongside conventional ones.

According to the interview, the farmers association accepts the roles of the ENGOs as the protector of the environment. They perceive that whatever the ENGOs are doing now is to protect the environment, and are doing their tasks.

Meanwhile, the government acknowledges that the ENGOs were the ones who started the procedure in Luxembourg, with the inquiries and complaint letter in 1998. They think that the ENGOs are doing what they are supposed to do. The ENGOs are also members of the Mina-Raad, and the Stuurgroup, in these advisory councils, the ENGOs can give advise to the government. As quoted from Mvr.Hilda van Dedrische, from the ministry of environment:

> *"They are doing their role, they have to keep repeating it. I can imagine if they get really tired. But it is necessary that they keep on doing it. They have to see the good results also."*

K. Conclusions and Recommendations

The writer has explored at the similarities and differences between the nitrate policies of the Netherlands and Flanders, Belgium to compare the policy situations in the two study areas. The similarities and differences are:

Similarities:

- Both environmental policies of the two countries **are subordinate to the nitrate EUD**.
- Nitrate policies in both countries **started to be developed in the 1990's**, the period in which the Nitrate EUD was enacted.
- Although there are differences in the ministerial representation, in reality these policy makers from environment and agricultural **sectors work together in achieving the goals of the nitrate EUD**.

Differences:

- The different of **vulnerable zones designation.** The Netherlands had designated all areas in the Netherlands as vulnerable zone. Whereas in Flanders, Belgium, designated a small part of the area, hence, when a country has less vulnerable zones than other countries, the Nitrate EUD will have less effect on that particular country.
- The two countries have chosen **different key instruments** to implement the Nitrate EUD: The Netherlands is concentrating on the MINAS system, while in Flanders, the key instrument for nitrate EUD implementation is the Mina-Plan 2000.
- **Financial support** for the farmers**.** In the Netherlands, farmers must bear the full cost. These hardships, if not appreciated by the policy makers, might ultimately result in the failure of implementation. Meanwhile, in the vulnerable zones Flanders, the government is providing incentives to farmers, who use fewer nutrients than the standards.

1. Role of ENGOs in the Policy Setting

Generally speaking we may conclude that Nitrate EUD made the ENGOs stronger and more resourceful in resuming their strategies in the nitrate conflict. The conflict on Nitrate EUD implementation had also risen the awareness of the actors in the study areas on the problems of nitrate. Previous to the nitrate conflicts, other major actors involved in the nitrate issue would admit that there were nitrate problems existed in their areas. From the findings above, it can be concluded that indeed the ENGOs in the study areas have important roles to play in nitrate conflict management, and also in the environmental policy settings in the study areas. With the existence of nitrate conflict, the policy makers are encouraged (if not pushed) to established and renewed their current nutrient policies and political efforts.

The ENGOs are the tips of the environmental spears that raised the awareness of the major actors, as well as the public, on the importance of nitrate problems. These highlighted the ENGOs roles in civic engagement in developing democratic environmental management, where the ENGOs as members of the civil society are able to

express their opinions and defend their strategy according to their ideals, in the name of the environment.

2. Theoretical Relevance

This study has used the theories on ENGOs, such as the typology of the environmental movement by Diani and Donati, 1999, which group the environmental movements based on their resource mobilization and political efficacy into four organizational types. The typology was very useful in grouping the ENGOs, especially to identify the ENGOs by their different strategies in the conflict management. The study has proved that the typology is applicable in grouping various ENGOs of different places and sizes, based on their resource mobilization and political efficacy.

The conflict theories have helped identified when and how the conflict began. In the two study areas, the conflicts started with differences of perceptions. According to Chatterji,M., Arlosoroff,S., Guha,G. [20], conflicts can start based on the differences of perception. Although, as one of the research findings in this study, a conflict can also start from the existence of a circumstance, not only perception. The circumstance in this matter was the existence of the Nitrate EUD, accepted as a 'norm' in the European Union, the Directive has to be implemented by all the Member States. This circumstance has caused conflict of interests between major actors in the nitrate issue, hence, this is where the conflict began. Meanwhile, the conflict management theories have also guided this study. The two institutions of conflict management, namely the cooperative and adjudication institutions have laid a strong base in drawing together the differences of the varieties of conflict management faced in this research. This study found the main conflict management strategy used was the negotiation conflict management strategy, where all parties sat together at one table and discussed on the nitrate issues. Apparently this strategy matches the current culture, politics and behavior in the two study areas. There is another conflict management strategy opted in this study, the adjudication strategy of conflict management. The fact that the nitrate conflicts have many aspects connected to them, means that integrated conflict management strategies are needed. In the two study areas, integrated conflict management strategies—integrating mediation with negotiation, mainly in the control of the policy makers. The need for a more active mediation in nitrate issues in needed

3. Comparative Perspective

As the study went, comparisons of the two study areas were discussed in a detailed manner. It is interesting to see the similarities and differences between two neighboring countries in the same umbrella directive, the European Union Directive. The Nitrate EUD, in this respect, has laid the ground of nitrate problem awareness in both countries. ENGOs in the study areas have intensively practicing important roles in the nitrate issues. Different sets of policies have been enacted in the study areas to implement the

20 Chatterji,M., Arlosoroff,S. , Guha,G., (eds), (2002)"*Conflict Management of Water Resources*", Ashgate Publishing Limited, England, pg.16.

Nitrate EUD, unfortunately, overall, it can be seen that the Nitrate EUD implementation is rather slow in both countries. Since 1991, there have been no signs that neither Netherlands nor Flanders Belgium will be able to reach the deadline of the Nitrate EUD in 2003.

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