

Managing Transboundary Common Pool Resources.

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Introduction

Environmental problems are seen to be an inevitable outcome of our fulfilling the necessities of daily life. This statement puts us smack in the middle of the problematic we will be discussing in this paper. Simple though the statement may seem, it is of far-reaching consequence for the way in which we deal with environmental problems. If we are prepared to regard environmental problems as disturbances of the material world around us, which stem from the ways in which we make a living, we realize that a quest for solutions often involves radical change. Such change calls for a different definition of the 'necessities of daily life'. Vested interests are very likely to be corroded, acquired freedoms limited and traditional property rights called into question. From a political perspective, these are no mean issues. They profoundly affect society at large.

From the viewpoint of public administration environmental policy tends to be concerned with questions of allocation of scarce resources 1). It draws the line on utilization of the physical area. This in turn limits the scope for developing certain interests. For example, industrial development can only take place within specific preconditions. In some locations, agricultural intensification will have to be scaled down. In others,

opportunities for exploiting mineral resources will be running out over time. In compensation, environmental policy also opens up doors: to a healthier way of living, a greater variety of species, more opportunities to enjoy nature and scenery. There will be greater scope for future generations to utilize whatever constitutes the physical environment in their age.

If problems of allocation were tackled with genuine vigour, they would rank very high on social conflict indicators. The experience of environmental policy-making, though relatively recent, has made this quite clear. The road which leads from the perception of environmental problems to their solution is paved with conflict.

In this context we speak of environmental conflict, since it is some or other desired quality of the physical environment that triggers the conflict. But in effect, there are underlying conflicts of a much broader import, which are pre-eminently of a social nature. Environmental objectives clash with other social priorities, which are often appreciated just as greatly. Present modes of industrial development, agricultural production and exploitation of mineral resources serve important functions for society. Moreover, the developments in this field have their own dynamics, which are initially unrelated to environmental goals. Changes therefore cannot be realized overnight. That is, not without giving rise to social disruption.

Environmental conflict in itself may be considered a positive phenomenon. It signals the inception of an inescapable process of social transition. Environmental conflict however may easily become dysfunctional, when it causes social developments to stagnate. Legal deadlock, delayed investment and symbolic policy are examples.

In addition, environmental conflict had better not be denied or repressed. The formerly centralized economies of Eastern Europe show the dire consequences of that approach. For years on end, but a single antagonism was recognized there, that of Capital and Labour. Over time, this proved to spell disaster for the quality of the physical environment. Since environmental conflict, too, has become a focus for attention after the revolution, we watch the environmental aspect take its proper place as part of imperative social changes for the very first time.

However, a positive appreciation of environmental conflict is not getting us a long way. It may be interpreted as an indicator of social change. But if so, we need to find out how the conflicts may serve as a starting point for continued change that does not lead to social disruption.

Let me go into those specific demands through a discussion of some instances of environmental conflict. The instances of environmental conflict I want to present take place in an international context, in fact they are transboundary environmental conflicts. Environmental policy seems hardly capable of addressing these conflicts. It could be asked why this is the case, and if directions for solution can be indicated. As a central thesis, I will argue that environmental policy is overly concerned with the problem of allocation. This problem is closely related to the policy's place in society, and with the procedures that underlie its making. Managing processes of social change, then, ought to take greater prominence.

Instances of transboundary environmental conflict

Transboundary conflict is a common article in the Netherlands; there are disputes with Germany, but notably with Belgium. These

conflicts have been going on for years, and the prospects for solution are not too promising.

My first example concerns a conflict of interest between nature conservation on the Dutch-German border and brown coal mining in Germany. The important nature reserve of Maas-Schwalm-Netten straddles the Dutch-German border. Extensive woods and heaths, streams and pools mark the area. Since time immemorial, the area has been the commons of eight Dutch and six German villages, which came to graze their flock and to hunt, for wood-chopping and peat-cutting and collecting straws. In recent decades, however, pools have fallen victim to acidification, heathland to grass intrusion, streams have dried up. The gravest problem is the decline of the water table, which makes the deleterious effects of acid rain all the more felt. Over the past twenty-five years, the water table has fallen by several feet. A very large brown coal pit just off the Dutch border is thought to be one of the largest water consumers - at least, that is as the Dutch would have it; the Germans deny it. The pit provides a fourth of the Ruhr area's energy supplies. Lately, a preliminary decision has been taken to develop a new pit in a few years, which should fit in with environmental standards. The Germans favour this particular source of energy, since they are wary of expanding their nuclear capacity, and wish to avoid dependence on foreign sources of energy. The Dutch try to keep themselves informed of the progress in the decision-making process. But formally, they are complete outsiders.

A second example relates to limestone development on the Dutch-Belgian border. There has been limestone mining on the 'Pietersberg' since the nineteen twenties. On the Dutch side of the Pietersberg, opportunities for limestone exploitation are gradually running out. The Netherlands province of Limburg has made a

strenuous search for alternative sites. However, the area Limburg set its sights on what happens to be a national reserve, one of Holland's five national reserves. It turned out that development of this site did not command public support. Therefore, attention turned to the Belgian part of the Pietersberg, an area which, incidentally, is also of great natural value. Existing concessions may pave the way. The affected Belgian municipality has not been consulted. For its part, this municipality is convinced that the Netherlands can only conduct a restrictive domestic materials policy by virtue of importing raw materials from abroad. The Netherlands simply choose to close their eyes to the effects on nature and scenery. The Belgians, then, try to keep themselves informed of progress in Dutch decision-making as best as they can.

The third instance of transboundary conflict pertains to water pollution. The most notorious example is the River Meuse, which flows from Belgium into Dutch territory, but the same problem can be observed in other transboundary streams. The Meuse is one of Europe's most heavily polluted rivers. The industrial estate of Liege, a city just off the Dutch border, takes a sizeable share in this pollution. The concept of water treatment has hardly taken hold in Belgium. In addition, there are limitations in the financial department: owing to ill-advised financial management, Liege may for all practical purposes be styled a bankrupt city. The Netherlands have been faithfully gauging water quality in the border area for years. The measuring instruments have become progressively more sophisticated over time. As a result, it is now feasible to take timely measures if the influx of Meuse water into Dutch territory is contaminated by certain pollutants. In such cases, intake from this stream for domestic consumption is temporarily discontinued. The Belgians now intend to gauge the quality of Meuse water as well,

a couple of hundred yards away from the Dutch gauging station. The measuring devices they plan to use are considered outmoded by their Dutch counterparts. Besides, there is an additional problem - common to all transboundary waters - that for a long time, it was not entirely transparent to the Netherlands just who was in charge of water management in Belgium.

A closer look at environmental conflict

As noted earlier, the prospects for solution to many instances of environmental conflict are fairly gloomy. Various reasons could be adduced in explanation. In this framework, I will adhere to Lipschutz's classification of backgrounds to global environmental problems 2). It is striking that this classification also applies to regional environmental conflict.

In the first place, there is the problem of **incongruous scales** - the scales of ecosystems do not coincide with the scales on which the decision-making relevant to these systems take place. Decisions which entail (over)exploitation of an ecosystem's resources are often made outside the physical boundaries of that ecosystem. For example: in the context of materials policies, on energy supply, on mobility. Only when preliminary decisions on intended social activities have been made, which negatively impact on the ecosystem, are the two areas being linked. As a consequence. Germany first decides on its energy supply, Holland first decides on its limestone requirements, Belgium on industrial development. It is economic considerations that determine the decisions being made, whereas a review of the nature and possible solutions of environmental effects are relegated to a later stage. The less transparent the effects on a specific ecosystem, the greater the time lag, the larger the area affected, the more foreign the territory they cover - the less notice

is being taken of those consequences.

Second, there is the problem of property rights. Environmental degradation is often related to an inappropriate 'assignment' of property rights. Here, the terminology of "property rights" refers to all legal and non-legal arrangements relating to the utilization of environmental resources. In the framework of this discussion, property rights impinge on a country's autonomy in making decisions, the environmental implications of which affect other states. In the cases at issue, there appears to be a high degree of autonomy. Germany is autonomous in its decision-making on energy supplies. If the Netherlands succeed in signing a contract with a Belgian limestone supplier, they are not responsible for any of the exploitation's environmental implications any longer. For Belgium, the River Meuse is a suitable dumping ground for waste disposal, as the authorities are not accountable for environmental effects downstream.

Third, there is the problem of where to locate information. Information on environmental effects is often locally available. The farther relevant decision-making is removed from the affected area, the less accessible are required environmental data. This is even more true where state boundaries run between the locus of decision-making and the locus where environmental effects will be felt. In the examples I have presented, policy-makers are initially uninformed about the decision-making bodies and procedures in the neighbouring state. As a result, they often get hold of information on the proceedings (too) late. Significant research underlying decision-making is carried out without neighbouring states being aware of it. Environmental Impact Assessment, if carried out at all, generally halts at the border. And of course the language barrier most of time does not contribute to bridging information gaps or time lags, either.

Fourth, there is the problem of participation of those affected by the decision-making. This issue is related to that of autonomy in decision-making, which I touched on earlier. Transboundary participation with due respect to upholding autonomy would not be unthinkable - although the creation of a facility of appeal would be rather more difficult. However, this is usually not the kind of idea that comes to mind naturally. Interestingly, though, two Belgian municipalities did succeed in exacting a say in a different case, which deals with the intended expansion of Maastricht Airport. The inhabitants of border municipalities within the airport's approach route will be negatively affected. It took the intervention of the Dutch judiciary to have the two Belgian municipalities accepted as parties to the conflict. Incidentally, those German and Belgian areas which may be subject to nuisance did not appear in the Environmental Impact Assessment report.

Fifth, the problem of feedback plays a part. Here and there, some committees are on speaking terms. There are general consultations on country planning with Germany. Some local water control boards also keep in touch. There have been intergovernmental consultations on the River Meuse for many years. But mostly, these talks do not reach too far beyond an exchange of phrases and the occasional memorandum on objectives. Perhaps we ought not set our hopes too high, too soon. Abroad, international consultation on Rhine pollution is frequently presented as a successful example of policy development in transboundary water conflict. But, mind you, this is a conflict area where talks have been going on for forty years! 3). In short, systematic feedback on relevant developments is mostly absent. Simply because there is no such thing as a well-structured form of interaction and communication. There is little opportunity,

therefore, to establish personal relations between what we may refer to as 'next door neighbours'.

Limitations of environmental policy

Although there is a great deal of environmental policy-making going on, and that includes the international level, the policy does not seem to be up to providing adequate answers to environmental conflicts such as discussed above. It may be inferred from these cases that the present definition of the 'necessities of daily life' is no different from older ones. There is little to indicate that an ecologically inspired process of social change is set in motion. The management powers of environmental policies appear to be limited. As I see it, the reasons for this limitation have to be traced predominantly to the policy-making itself. I would like to zero in on two characteristics.

If we pause to consider environmental policy's place in West European society, we observe a peculiar phenomenon. Decisions on production, consumption and mobility which negatively impact on the environment are being taken in scores of locations. As I argued before, these decisions are inspired by market considerations. Moreover, they are supported by government, since the stakes are high. To cite but a single example: government subsidizes agricultural production, knowing there is question of excess production, and that the agrarian sector is one of the biggest polluters, notably in the Netherlands. Our type of society also provides for those cases where the effects on the quality of the physical environment come to show. In that case, a different sector of government comes to the fore, that of environmental policy-making. This sector acts as a legitimate, institutionalized counteracting force, which may try to exert influence as well. For example, by evolving correcting measures.

After all, the quality of the physical environment is a priority. As a consequence, environmental policy actually occupies a somewhat isolated position within the interplay of social forces.

In my opinion, however, the way in which environmental policy is being developed also contributes to its slightly isolated position. The conceptual thinking behind the policy merits special notice here. The awareness of environmental problems is predominantly based on scientific research. This research shows us the workings of the material world, the conditions and processes that keep it going and the causes for disruption. When disruption is perceived, there is question of an environmental problem, which makes the need for environmental policy manifest. Measures must be taken to restore balances as best as possible. The volume and impact of emissions and waste flows into the ecological system must be reduced. The same goes for the quantity of raw materials for utilization. A certain stock of wildlife must be conserved with a view to preserving ecosystems. Scientific thinking is then translated into the social framework. Standards are defined on the basis of our understanding of causal relations in the physical area: reduce emissions of SO₂ or CO₂ by this much, secure so many hectares for nature conservation. Thereafter, environmental policy-makers develop their own instruments to attain such objectives - permits, levies, subvention programs.

These characteristics of environmental policy show it to act essentially as a correction mechanism for society. Moreover, it is a mechanism that operates afterwards, that is when the damage has come to show. In its role as *ex post corrector*, environmental policy defines the problem of allocation as discussed at the start of this address. In so doing, the policy itself sparks off

the environmental conflict it has to solve subsequently. The government hereby predominantly acts, as it were, as an engineer, who controls the physical system on the basis of his understanding of that system. At times he will succeed, notably where the social effects of environmental policy are not that radical. But more frequently, the policy's implementation gives rise to conflict, which then gets bogged down in deadlock.

Towards a strategy for change

Environmental policy-making is an attempt to swim against the tide. This activity has a habit of wearing you out. Those who are in a better physical condition can hold out longer. Strengthening physical ability is central to environmental policymaking. Attention is focused on more specific definitions of environmental problems, a more pointed phrasing of environmental standards, and a search for better policy instruments to attain those standards. Our scientific research is geared at supporting that striving. As a result, though, the problem of allocation is becoming ever more clear-cut. This is not likely to improve the prospects of solving those problems. Counteracting forces will align themselves, even more so in times of economic downturn, or in times of comparatively minor prosperity. Environmental conflicts are likely to be more frequent, and more intensive, in times to come. It is questionable whether a continuation along the same lines, that is, reinforcement of environmental policy's role as a correction mechanism, will bring about the necessary changes.

Are there viable alternatives? Environmental policymakers cannot go around the need for being specific about the problem of allocation. But it is doubtful whether aims can be attained by swimming against the tide. A more fruitful strategy would seem

to me to divert the stream. In my view, the problem of allocation can only be solved if perspectives are simultaneously being provided for those interests which are affected by environmental policy. The implication is that environmental policy should put less emphasis on correction, and greater stress on creation of conditions for change; less emphasis on standards, greater stress on processes to attain those standards. Without losing sight of stated aims, such a policy provides a broader definition of the problem at issue. For, the problem here does not lie in failure to attain certain objectives, but in the need to provide opportunities for enterprise to adapt itself, for agriculture to restructure, in making alternative strategies for energy supply more manifest. To this effect, environmental policy should not be an external, counteracting force, it should be an interlocutor. The question of societal development then takes centre stage as the overarching problematic, as part of which the problem of (re)allocation is given due scope.

This may all seem a little on the abstract side. But in the actual practice of environmental policy-making in the Netherlands, there is a noticeable trend in this direction, per force on a regional scale. Several regions have attempted to approach perennial conflicts in a nontraditional way. The traditional road is to impose standards. Those are defined at the national level, and supposed to be realized at the regional level. This situation seldom materializes, though. However beneficial these standards may be to the environment, they are harmful to the agricultural and industrial sectors. Where these actors offer resistance, there are even times when they are more or less backed by other government institutions. A new management strategy has been tried recently in the form of so-termed 'area-directed' environmental policy-making. In this alternative, a number of government bodies and private interests work

together in a project organization. The objective is to work out a joint Plan of Approach for regional development through structured negotiations within the project organization. The planning process is not merely directed at attainment of certain environmental objectives, but also at new opportunities for other interests with a view to achieving their particular goals. The 'win-lose' situation that tends to arise when environmental objectives are the only focus is now adjusted towards a potential 'win-win' situation. Along these lines, it has proved feasible to reach environmental goals and create opportunities for industrial expansion at the same time. In an agrarian region, measures could be taken to improve a weak agricultural structure, which make it possible to secure long-run environmental standards simultaneously 4).

It is doubtful whether these results can be replicated in the international framework, i.e. for the type of transboundary conflict discussed earlier. There are at least two success factors that make the regional approach in The Netherlands stand out. The first factor lies in a broader interpretation of the environmental problematic. This is now taken to be a problem of comprehensive regional development. For those negatively affected by the environmental standards, alternatives are sought and new opportunities created. As a second success factor, processes of interaction and communication between private and public interests are set in motion, which are often very intensive. This clears the way for the phrasing of a common definition of the situation and for the participants' singular problem-solving abilities to join forces. Strikingly, these very success factors are absent in international conflict. Introduction of these factors could be of great help in clearing away the causes for deadlock discussed earlier. On a more cautious note, though, I would conclude that this type of innovative management strategy

merits greater attention than it is paid now.

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