GOALS

AND

SECTORS

Issues in environmental policies

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Goals and sectors. *Issues in environmental policies*

Preface

INVIRONMENTAL QUALITY OBJECTIVES and the responsibilities of different sectors of society are important issues in current Swedish environmental policies. The various national agencies are playing an important part in defining both objectives and the meaning of sectoral responsibility, and there is a vision of a broader participation by other societal actors as well.

The Swedish Environmental Protection Agency (Swedish EPA) has studied the introduction of environmental objectives based on the cooperation and responsibility of the sectors of society. The aim of the study is to learn from the way in which this extensive social reform is being implemented.

Within the EU, the responsibility of the sectors for the environment is of course a central theme, as witnessed by the successive decisions on sectoral integration by the Union at Maastricht, Cardiff and Helsinki. The findings of the Swedish study may therefore be valuable to the other EU countries.

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Innehåll

Summary

INVIRONMENTAL QUALITY OBJECTIVES and the responsibilities of different sectors of society are important issues in current Swedish environmental policies. The various national agencies are playing an important part in defining both objectives and the meaning of sectoral responsibility, and there is a vision of a broader participation by other societal actors as well.

The Swedish Environmental Protection Agency has studied the on-going introduction of environmental objectives and sectoral responsibility, which to a large extent depends on how different actors interpret their tasks. The study considers both relevant national agencies and other actors concerned, such as trade organisations, enterprises, environmental organisations etc. The objective is not to evaluate whether the environmental work is being well managed, but rather to point out opportunities and problems.

The concepts of sector and sectoral responsibility are discussed. A sector may be defined as a set of actors with common tasks or as a set of interrelated activities. The responsibilities of the national agencies may relate to their own sector or to one or more of the environmental objectives. These and other distinctions will prove useful in the further work of the sectors.

The study also shows that environmental work in Sweden depends to a large extent on the constitutional set-up with independent national agencies. The agencies are free to interpret their roles in environmental policy in different ways. A vertically oriented role interpretation can be compared to a horizontally oriented one. A vertically oriented agency expects concrete directives from the Riksdag and the government, and considers the

implementation of these directives. A horizontally oriented agency does not primarily see itself as a part of the parliamentary democracy but rather as one problem-solver among several, whose essential task is to work together to solve important problems. Both interpretations find support in government documents.

In order for the sectors to proceed with their environmental work, operative structures for cooperation between different actors are necessary. The study indicates that national agencies mostly tend to cooperate with one another. Although non-governmental actors say that agencies are their most important partners in their environmental work, cooperation between the two is limited. Agencies and other actors have different opinions regarding the main obstacles to extended cooperation. While agencies tend to emphasise a lack of resources and insufficient data, non-governmental organisations often find that different interests and different perceptions of reality are the main drawbacks. This is true especially for organisations working with vertically oriented national agencies.

There is no need to define sectoral responsibility rigidly. The national agencies work in very different fields, calling for different strategies. However, there are good reasons to discuss the various role interpretations explicitly. It is important for their cooperation with other actors that the various parties basically agree on their respective roles and expectations. The agencies should also broaden their contacts outside the government sphere.

In the report, there is also a discussion of some important issues relating to environmental policies. The need to consider alternative environmental objectives is emphasised, as is the long-term importance of using the government budgetary system as an effective instrument for implementing environmental policies.

1. Introduction

THE SWEDISH INVIRONMENTAL PROTECTION AGENCY (Swedish EPA) has studied the introduction of environmental objectives based on the cooperation and responsibility of the sectors of society. The aim of the study is to learn from the way in which this extensive social reform is being implemented. This information may be of value both for the government and for national agencies as well as, we hope, for organisations outside the public sphere. The issue is what it means for a *sector* to take *responsibility for the environment*. In particular, we want to shed light on how individual actors, within and outside government administrations, interpret their role and their environmental responsibilities and whether there are differences between actors in this respect. We hope to stimulate debate rather than decide whether the introduction of environmental objects proceeds satisfactorily or, for that matter, present far-reaching proposals for improvement.

The study was conducted during the period *subsequent to* the proposals for targets and sector goals submitted in 1999 by a series of national agencies, to render the fifteen national environmental quality objectives more tangible, but *prior to* the government taking up a position on the recently submitted proposals from the Environment Goal Committee. The government is expected to adopt a position in early 2001.

The interpretation and implementation of work on environmental objectives and sector integration during the first half of 2000 provides an important foundation for the work that will be conducted in the future. The work on objectives conducted during this period within many national agencies and within bodies outside the public sphere means that actors are in the process of interpreting their roles and their responsibilities. The importance

of this work can be seen in the fact that there is considerable scope for interpretation in the government assignment concerning the specific sector responsibilities. This will be shown below.

The study has been conducted in the following way. *Firstly*, we have collated background knowledge by analysing the reports from the national agencies and other environmental plans from 1999, which represent the point of departure for further environmental objective and sector work. We have also considered the government's Environment Bill for 1998 and the document 'A Sustainable Sweden' from 1999 (see section 2). *Secondly*, we have analysed the central concept of a sector (section 3). *Thirdly*, we sent out a questionnaire and conducted interviews (section 4). The questionnaire is directed to environmental specialists at twenty or so agencies who are responsible for the formulation of environmental goals. A similar informal questionnaire was sent out to the county administrative boards, and a questionnaire was also sent to people involved in environmental work at around forty non-public organisations within the sectors. In addition, the latter questionnaire was complemented by telephone interviews. *Fourthly*, we take up some aspects of the information required for implementing sectoral responsibility (section 5).

2. Points of departure for environmental policy

IN THIS SECTION WE DISCUSS IN BRIEF the characteristics of the Swedish constitution and the formal basis for environmental policy as a point of departure for the following sections.

2.1 Characteristics of the Swedish constitution

One characteristic of Swedish government administration, which differs from more or less all other countries' administrations, is that the ministries and agencies are separate entities; the agencies are not part of the ministries. Obviously, the Riksdag and the government decide what kind of society we should have, in overall terms. They also establish the terms of reference and the budget for the agencies, and the government appoints the director-general. On the other hand, the task of the agencies is to implement the political decisions independently. The government may not become involved in and influence individual issues of application, which are dealt with independently by the agencies. This means that there is no difference in principle between the courts and the agencies.

This system has both advantages and disadvantages. One important advantage is that the political level can be relieved of processing a large number of detailed decisions of an administrative nature and can then devote more time to general policy issues, while the greater expertise of the agencies in their specific areas can result in better administrative decisions. Public servants stand free from political pressure at the same time as there is an

appeals procedure which normally enables the general public to complain about decisions made by the agencies. The Swedish system is well in line with the move towards decentralisation which characterises management by goals, program budgeting and similar administrative reforms. This is all the more important in an increasingly complex society.

However, the system is based on the assumption that a distinction can be drawn between political decisions taken by the government and ministries on the one hand, and administrative decisions made by the independent agencies on the other. But it is obvious that the implementation of political decisions may also involve judgements and values which sometimes have political implications - in this way the administrations can in practice exercise political influence. This is especially true of environmental policies where the political goals are often general and therefore allow the agencies considerable freedom of movement.

Thus, the decentralised Swedish system implies that the distinction between issues that should be decided by the government and issues decided by the agencies can sometimes be unclear. But it also means that there is more flexibility in finding the most appropriate level for decisions in the different cases depending on the nature of the issue. More complex matters of detail can today be delegated to competent agencies at the same time as the Riksdag and the government can retain the right to decide in more general issues. As we will show, this system has considerable impact on the way in which Swedish environmental policy works.

2.2 The formal basis of environmental policy

Sustainable development is now a general, politically established objective in Swedish politics. In order to achieve this objective, we have to consider three interdependent aspects: sustainable development has to be economically, socially and ecologically viable. The task of environmental policy is to promote the ecological aspect.

In 1999 the Swedish Riksdag established 15 general environmental quality objectives[1] intended to infuse content into the concept of ecologically sustainable conditions. The objectives have to be more precise in order to function as guidelines. Some twenty agencies were requested by the government to propose more tangible formulations in targets and sector goals[2] and the proposals were submitted in the autumn of 1999. The county administrative boards and other regional bodies have been requested to propose regional targets. A public parliamentary inquiry, the Environment Goal Committee, proceeded with work on the basis of these proposals and submitted its findings in June 2000. The government is expected to adopt a standpoint for presentation to the Riksdag in early 2001.

The government's most important strategy for controlling development towards the objectives can be summarised in the concepts of integration and sectoral responsibility. *Integration* implies that environmental considerations should be incorporated into all activities of significance for environmental problems. In other words, environmental problems should be attacked at source in activities which give rise to environmental problems. *Sectoral responsibility* implies that the responsibility for the environment lies not only with the Swedish EPA and the environmental divisions at the county boards, but with all sectors of society. The implications of this are discussed in section 3.

The new environmental policy heralds a new approach in environmental politics: the detailed state controls of environmental protection are replaced - in line with what is generally applicable for the Swedish government administration - with the demand that goals and results should be achieved. This places new demands on national agencies whose job it is to implement these goals. In July and August 1998, the government decided to allo-

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[1] The objectives are: clean air, high quality groundwater, sustainable lakes and watercourses, flourishing wetlands, a balanced marine environment with sustainable coastal areas and archipelagos, no eutrophication, natural acidification only, sustainable forests, a varied agricultural landscape, a magnificent mountain landscape, a good urban environment, a non-toxic environment, a safe radiation environment, a protective ozone layer, and limited influence on climate.

[2] The environmental quality objectives were made more concrete in targets decided by the government. Sector goals are the sectoral parts of the targets and are formulated by the sectoral agencies.

cate specific sectoral responsibility to the agencies for ecologically sustainable development. This means that each agency should integrate environmental considerations within its normal activities while also working to promote ecological sustainability within the entire sector for which it is responsible.

This responsibility is described in more detail in the 1998 Environment Bill '*Swedish Environmental Objectives*'. The agencies, along with the relevant actors within the sectors, should provide the basic data relevant for sector goals and measures, assess the social costs and impact for the sectors and should also promote the implementation of the appropriate measures. The sector agencies are responsible for following up the work initiated and should inform the sectors of the results, evaluating the work in a dialogue with the sector concerned. They should also identify their own role and stipulate how the work conducted by the sector affects the development towards ecological sustainability.

The task entrusted to the agencies is therefore not a fixed and complete package but allows considerable scope for interpretation of what sectoral responsibility means. This is a main theme of the report.

Moreover, Sweden's international obligations affect Swedish sector integration since the sector principle has also been adopted internationally. The UN conference on the environment and development in Rio de Janeiro in 1992 stated in the Agenda 21 document that environmental considerations should be integrated at various levels of society. Within the EU, the responsibility of the social sectors for the environment is a central theme. The idea has been adopted in both the Treaty of Maastricht 1992 and the Treaty of Amsterdam 1997. The Cardiff Process of 1998 reinforces the idea which is presently being implemented in three areas: energy, transportation and agriculture. Six further areas have been indicated: internal markets, overseas development assistance, industry, Ecofin, the Fisheries Council and the EU General Council's area of activities. The issue of sector goals has also been discussed within the EU. The Helsinki Congress in December 1999 increased the pressure to pursue this work.

3. Sectors and sectoral responsibility

THE CONCEPT OF A SOCIAL SECTOR is of considerable importance in the environmental debate both in Sweden and other countries, not least within the EU. The sector concept is central for practical environmental policy since it affects all actors with responsibility for various areas. The distribution of responsibility within and between the sectors is clearly decisive for an environmental policy which depends on the participation of the social sectors for its implementation.

Nevertheless, there is no clear official definition of the sector concept and it is unclear how it should be demarcated in practice. Experience shows that the exact delineation of their sectors is not always obvious for the agencies. For this reason, it is a matter of urgency to discuss and define more precisely how terms such as 'sector' and 'sectoral responsibility' should be used.

The point of this section is to indicate how such terms may be used, but *not* to propose any specific fixed meaning. It is important to retain flexibility to accommodate the shifting needs of environmental policy. What is important is to know in each specific situation how the terms 'sector' and 'sectoral responsibility' are used.

We take up three aspects of the concept of a social sector. Firstly, how the concept of a social sector can be defined (section 3.1) followed by what sectoral responsibility might involve in brief (section 3.2) and finally the issue of sectoral responsibility and the level of ambition (section 3.3).

3.1   The concept of a social sector

In order to get a clear definition of sector responsibility, we distinguish between three perspectives on the concept of a sector. These perspectives differ in content and sometimes also in extent. They do not, however, exclude each other but rather describe different ways of understanding the concept of a social sector. Each perspective is of value in environmental policy.

a) *The actor perspective*: a sector can be seen as a collection of actors[3] which have more in common with each other than with actors in other sectors, in other words, they engage in regular cooperation. The actors from the agricultural sector are mainly farmers, farming organisations, county farming committees and the Swedish Board of Agriculture. The equivalent is also applicable to the forestry and defence sectors. In other cases, it may be difficult to demarcate a common area: neither industry nor consumers have any internal cohesion which makes it difficult to refer to sectors in the sense of actors cooperating with each other. Some sectors may overlap with others; transportation and energy are used by both consumers and industrial companies as well as in agriculture and forestry. If we place the issue of sectoral responsibility and the distribution of responsibility in focus, the perspective of the actors concerned is particularly relevant. (We will return to this issue in section 4).

b) *The activity perspective*: a social sector can be seen as a collection of activities with the same content. The focus is placed on *what* is done, not *who* does it, as in the actor perspective. The agricultural sector is no longer a collection of actors in the activities perspective, it is rather a type of activity, namely, agricultural production in various forms. The aim of these activities need not be officially defined (it is probably only in the case of public sector activities such as defence that such an aim exists). It

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[3] An actor can be defined as a decision-making unit such as an agency, an organisation, a company or a household. An actor can be a physical or legal entity (or part of one). The definition of a more specific environmental actor is a task which can be said to be part of the work of a sector. Is it the government, the relevant agency or the actor itself who should establish this? Are all the actors influencing the environment automatically environmental policy actors? If such is the case, then the concept of an actor becomes too diffuse.

is sufficient that the sectors involve, as a matter of course, activities which are of the same ilk. Using the terminology of economics, a sector is a collection of activities described by production functions or consumption functions (preference functions) for the same or similar goods and services. In each sector, the aim of the activity is in principle one of production (for example; in agriculture the production of food, in forestry the production of timber and pulp) or of consumption (different aims for the public and private consumer sectors). Demarcation problems arise also in this perspective. It is easy to define certain sectors whose activities have concrete aims shared internally (the forestry sector, the agricultural sector, the defence sector), while industry and consumption consist of common activities only in the most general sense (production or consumption of goods and services). Transport and energy are also reasonably easy to define (through the aims of supplying society with transport and energy) even though they overlap with several other sectors. The activity perspective is appropriate for discussions about how various social activities relate to each other, such as the extent to which increased industrial production requires more transportation and energy.

c) *The statistical perspective*: a sector can be seen as a statistically definable part of society. If we use the national accounts as a point of departure, the sectors can immediately be defined clearly and quantifiably both in terms of money and employment. There are established methods for dealing with possible overlaps between sectors which means that such instances have been eliminated. The national accounts provide scope for the clear demarcation of all the sectors generally used within environmental policy.

The statistical perspective can be used in other ways than the two perspectives mentioned above. *Firstly*, it offers a well-developed base of statistics (concerning employment, production and value added etc.) which can be linked to environmental statistics for other sectors (such as emissions and waste). The environmental accounts can therefore be based on a foundation of statistics which also have international links: the Swedish national accounts are linked to a European standard. *Secondly*, it is possible

in principle to link up the environmental statistics with economic theories - the point of the national accounts is that they provide a base for economic policy. This may, at least in principle, show the relationships between economic cycles and economic growth, on the one hand, and environmental impact on the other.

The actor and activity perspectives are politically oriented. In other words, they are useful when it comes to taking political measures (environmental policy measures as well as others). It is possible to focus on different aspects of the cooperation between actors or activities depending on which measures are deemed necessary as politically important in different cases, which means that sector demarcations may vary. It is e.g. possible to include transportation in the energy sector, if you want to formulate an overall energy policy. The activity and statistical perspectives both divide up social activities in economic terms. The difference between them is that the former defines topic and politically important areas while the latter offers permanent definitions of well-demarcated activities.

Since there are different purposes for using the concept of sectors, there is no need to limit the uses made of the concept in advance. The question arises whether it is necessary to use the concept of sectors at all in environmental policy since this concept has led to a substantial amount of verbal dissent.[4] Nevertheless, the concept can be useful, especially when discussing who bears the environmental responsibility. In any case, it is an internationally recognised concept although often rather a vague one. It should be made clear in each individual case what exactly is meant.

The statistical perspective can contribute to clarifying the areas of demarcation regardless of what purpose the sector distinc-

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4 The distinction between the actor and activity perspectives is not only dictated by the environmental problems under discussion. It is also associated with differing points of departure concerning what is important as the subject of a social study. For those who study individuals or groups of individuals and their opportunities to change their social situations, the actor perspective is the most natural choice. This includes many behavioural scientists such as sociologists and political scientists. For those who believe, on the other hand, that independent structures or systems and their laws are the most important aspects to study, the activity perspective is an obvious choice. This is the case, for example, for many economists and also for structuralist approaches. Disagreement regarding how social reality should be perceived also carries ideological overtones.

tion serves. The actors and activities selected for inclusion can vary depending on the environmental policy needs at the time. This need not, however, lead to ambiguity if the sectors are defined on the basis of the statistical perspective, in other words, including activities as identified in the national accounts. Significantly, all the sectors indicated in environmental policy can be easily identified in the national accounts.

The advantages of using the national accounts as a point of departure for demarcating social sectors are that it becomes possible for each sector to state clearly which actors or activities are involved, which are useful when it comes to making decisions regarding measures, areas of responsibility and follow-up. At the same time, it is obviously acceptable to depart from the national accounts when political and administrative differences are not identical to the statistical definitions for various reasons. In such cases, the departures should also be clearly specified. A basis is thereby established for discussion of actors and activities on the basis of the statistically defined sectors – in this sense, the actor and activity perspectives continue to exist within the statistical perspective. The national accounts' distinction between production and the consumption of society's resources contributes significantly to greater clarity.

This can be expressed in terms of the national accounts' sector distinctions being set on a grid of coordinates on which the relevant actors and objectives can be identified more precisely. This method does not become less useful when the realities of environmental policy differ from the grid of coordinates - in the same way that rivers do not have to flow along the coordinate grid on a map, or cities have to lie exactly at the coordinate points!

3.2 The concept of sectoral responsibility

The concept of sectoral responsibility is central in the new environmental policies, especially since it highlights the issue of sectors being something to which environmental responsibility can be attached. The concept is linked to actors which can take responsibility. This renders the actor perspective rather than the ac-

tivity or statistical perspectives more natural in discussions concerning sectoral responsibility. The implications of sectoral responsibility are unclear, however, so we intend to discuss the issue in this section.

The concept of responsibility can be made more precise by discussing *who* is responsible and *for what*, *how* this responsibility is undertaken and *to whom* one is answerable. We discuss the concept of responsibility on several occasions in this report. In this section, we analyse in brief the responsibilities of national agencies as regards environmental objectives (the first and second issue) and how they are undertaken (the third issue). In section 3.3, we examine the issue of how the responsibility of the agencies can be extended (basically a political issue). In the final section, section 5, we address further parts of the third issue, the way in which responsibility is undertaken. The issue of to whom agencies are responsible is not taken up in this report, nor is the question of what happens if an agency neglects to fulfil its responsibilities.

a) Types of responsibility held by national agencies. The government delegates specific sectoral responsibility to a number of agencies for ecologically sustainable development. However, since the organisation of environmental objectives and sector work has not been worked out in detail, the concept of responsibility has not been unequivocally defined and the distribution of responsibility between the agencies has not been specified. It is possible, nevertheless, to discern certain roles or types of responsibility:

- The agency's responsibility for its own sector, namely to ensure that the activities of the sector are consistent with established environmental objectives. This means, for example, that the Board of Agriculture would monitor the environmental objectives relevant for agriculture. This type of responsibility is taking shape for the majority of the sector agencies such as the Board of Agriculture, The Board of Forestry and the Armed Forces.

- The agency's responsibility for one or more environmental objectives which implies a responsibility to coordinate all the necessary measures for the achievement of these objectives across sector divisions if required. The agencies

mentioned in this context in the 1998 Environment Bill include the Swedish EPA, the National Chemicals Inspectorate (which has since been given general responsibility for the *Non-toxic environment* objective) and the Institute of Radiation Protection (which has been given the equivalent responsibility for the *Safe radiation environment* objective).

- General overall responsibility for the task of developing environmental objectives and for following up how the objectives are met has primarily been given to the Swedish EPA, with aspects of responsibility also given to the Central Board of National Antiquities (for the cultural environment), the National Board for Housing, Planning and Building (for physical planning) and the National Board of Health and Welfare (for health).

The remainder of this report is limited to discussion of the first type of responsibility and how it is interpreted in terms of working towards environmental objectives. The term 'sectoral responsibility' will henceforth be used exclusively for this type of responsibility. This restriction means that the increasingly significant issue of the special role and responsibility of the Swedish EPA in the work concerning environmental objectives and sectors will not be examined here.

b) Centralised or decentralised sectoral responsibility. A further question concerns the way in which the sector agencies implement environmental objectives together with other relevant actors.

This issue should be considered against the background of the organisation of sector integration (see section 2) The independent agencies, particularly those with specific responsibility for their own sector, have a central role in the work of implementing environmental policies. Their role is not merely to implement policies – in cooperation with the relevant actors within the sectors – but also to formulate it; a process which is far from complete. The agencies have also been requested by the government, as already mentioned, to define the implications of sectoral responsibility, which means that they themselves will be interpreting their roles in terms of their responsibilities for the sectors.

This comprehensive organisational reform is complex and impossible to predict and control in detail. We have also seen, as will

be developed further in section 4, the development of dissent between two approaches in environmental politics, between a centralised and a decentralised policy.

On the one hand, environmental policy is centralised since the proposal presented by the agencies for targets are to be coordinated and ultimately decided on by the Riksdag. The aim of this is to achieve an environmental policy which is coordinated and economically feasible. The idea is that the various types of objectives should contribute to the construction of a hierarchy from general objectives to specific sector goals and regional goals, thereby making the entire objectives system a practical control instrument for the Riksdag and the government. The agencies submitted their proposals for targets and sector goals on 1 October 1999, as we mentioned in the introduction to this report, and are currently waiting for a response from the government. If we see the task of the agencies as one of implementing the decisions of politicians, they should now await the parliamentary decision, expected in the spring of 2001 at the earliest, after which they will be delegated the implementing responsibility.

On the other hand, sectoral responsibility and the idea of sector integration are formulated – particularly in the government's environmental objectives directive of 1998 – so that the main responsibility for the environment should be taken by the actors within the social sectors with agencies acting as a driving force at most. One purpose of this approach is to make use of the expertise and involvement within the sectors. This attitude towards the work of formulating objectives and sector responsibility is in line with the interpretation that responsibility should be an issue of importance for all actors. This requires more than the passive awaiting of directives; it requires active involvement on the part of the agencies and sector actors in striving for a better environment despite the fact that the government has not yet decided on environmental objectives. This approach is feasible as a consequence of the decentralised nature of Swedish government administration with independent agencies (see section 2.1 above).

The tension between the two approaches is an expression of what is known as a procedural goal conflict between the need to coordinate environmental policy centrally and the desire to make use of the individual actors' expertise and involvement with re-

gard to their own environmental problems. This inevitable conflict becomes apparent, as described in section 4, in the decentralised Swedish government administration.

3.3 The extent of sectoral responsibility

When defining sectoral responsibility, we should distinguish between the issue of what the sectoral responsibility of the agency implies, and the important issue of how far an agency should go in the work of achieving sustainable development. The latter is an issue concerning the level of ambition for environmental work. There are, in principle, two distinct ways of interpreting this responsibility.

1) Sectoral responsibility can require the agencies to integrate environmental aspects as part of their regular work. The normal tasks conducted by the authority should be environmentally adapted; the provision of financial assistance, supervision to ensure that laws and regulations are respected, the issue of permits, provision of advice, training, investments and so on. The agencies do not acquire any new tasks but should rather apply environmental considerations to everything they currently undertake.

2) Sectoral responsibility can also mean that agencies should strive to integrate environmental aspects to a greater extent in other parts of society, in other words, not only as part of their current tasks but also in areas relevant to concerns related to companies, non-public sector organisations and consumers. The responsibility of the agency is then extended to include a greater portion of the private sector. Such an interpretation implies that sector integration and environmental objectives to a larger extent would become political objectives for other parts of society.

The second interpretation implies a greater level of ambition in environmental policy. Examples might include the Swedish National Energy Administration taking on the new task of formulating and promoting targets for the energy consumption of house-

holds and companies, or the Swedish Consumer Agency being required to actively restrict the consumption of clothing, home electronics and travel.

This is closely associated with the political issue of how far the influence of the state should extend and what role the state thereby adopts. Of course, the aim of environmental policies - regardless of interpretation – is to influence society beyond the public sphere. The question is how far the sectoral responsibility of national agencies should stretch. Sectoral responsibility should probably vary in different parts of the community and for different environmental objectives. The national agencies can hardly be given responsibility for everything commercial interests and consumers do. But they should, on the other hand, retain a significant influence on, for example, energy production as a whole. It is the task of the Riksdag and the government to decide whether sectoral responsibility should be extended in individual cases.

4. How the actors perceive their roles

HAVING CLARIFIED THE CONCEPT of a sector, we proceed in this section to discuss the social sectors' work with environmental objectives. We focus in particular on how the different actors perceive their tasks and which contacts are made on the basis of questionnaires and interviews. This requires the use of an actor perspective. The aim of this section is to increase the understanding of the complex process underway rather than to criticise the behaviour of any individual actor. We have approached individual environmental experts within the agencies and organisations[5], but these individuals do not necessarily represent the position of the bodies by which they are employed. This means that the material can be used to illustrate different angles of approach on environmental objectives and sector work, but it cannot prove any definite theses. As established in the introduction, our aim is to point out possibilities and to stimulate debate, and then this method is adequate despite its limitations.

We begin with an overview of work on environmental objectives during the first half of 2000. We then proceed to a discussion, of the government and then the non-governmental actors'

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[5] We have sent questionnaires to persons at 23 agencies who are responsible for formulating goals and have received 22 responses (of which one was by phone), to persons at all the county boards and have received responses from all of them, as well as to 45 actors outside the state sector (informants in industry organisations, trade unions, companies, The Swedish Association of Local Authorities and environmental organisations) and have received 36 responses. Complementing telephone interviews have been conducted with 17 informants from the latter group.

interpretation of their roles against the background of the consideration in the previous section, and, finally, draw some general conclusions from the section.

4.1 Work with environmental objectives during the first half of 2000

The agencies, as already noted, have been given general responsibility for sustainable development within their areas and this responsibility is obviously linked to environmental objectives. It is therefore of interest to see the extent to which environmental objective work is conducted in the different sectors during this period. Our questionnaire shows that some work is underway regarding environmental objectives. Of the 18 national agencies which responded to this question, all except three conduct some form of environmental objective work while all the county boards do so. The normal response was that 0.2-3 personnel months were invested in this work during the period but some national agencies and some county boards devote significantly more work to environmental objectives.

Among the non-public organisations the picture is more diffuse. Of the 31 non-governmental actors that responded to the questionnaire on this issue, 9 did not conduct any work with environmental objectives in the spring of 2000 (mostly organisations within retailing and food and grocery products). Of those which did work with environmental objectives in some form, 16 are basing their work partly or as a whole on the governmental environmental objectives while 6 do not. The majority of those using the governmental objectives said that these were of value to them. The majority of organisations that worked with environmental objectives during the first half of 2000 invested 1-6 personnel months in the work on objectives, while the agricultural sector invested 20–30 personnel months.

We can conclude that the national agencies most frequently see their role as one of continuing the work underway. In the private sphere, work is also being conducted on environmental objectives although on a smaller scale. The national environmental

objectives often provide the basis of work carried out. Not all private actors participate in sector integration.

4.2 National agencies

Our investigation illustrates that within different agencies, the tasks connected with environmental objectives and sectorisation are interpreted in different ways. Sometimes the main task is considered to be a detailed specification of national environmental quality objectives, while in other cases the task of creating networks and cooperation within the objectives is given priority. The difference between these two approaches illustrates how both state and non-public actors are working with environmental objectives. In order to analyse this result, we require some theoretical background. We proceed as follows; first we define two possible roles which make use of the arguments from the previous section concerning the different methods of implementing sector responsibility. We then provide a more detailed account of how these are viewed within the agencies.

It is possible - within a decentralised national administration like the Swedish system – to define two different roles for the administrative agencies. The vertically oriented agency awaits concrete directives from the Riksdag and the government and sees its task as one of implementation. This role is in line with a centralised approach to environmental policy. The horizontally oriented agency, on the other hand, sees itself less as the long arm of parliamentary democracy and more as one interested party among many others, governmental as well as private, with the task of solving a substantial problem. This is in line with a decentralised environmental policy where responsibility for the environment is taken by the sector itself. It is more important to build up a network of contacts for the horizontal than for the vertical structure.

These two distinct roles can be referred to as the 'implementer' and the 'networker'. For the former, the task is to await a concrete assignment which will eventually result from the current environmental policy debate. For the latter, it is natural to create the content of environmental policy – prior to the establishment of national environmental objectives.

Different types of problems are expected to be central, depending on the way in which the agency sees its environmental policy role, and challenges and opportunities will also be evaluated in different ways. The role will be more clearly demarcated for the implementer and will therefore appear easier to handle. But problems may arise for the implementers if the signals from the government are perceived as unclear or contradictory, or if they are not provided with sufficient tools for the completion of the task. On the other hand, for the networker, who focuses on the initiative of the actors involved, the task appears more comprehensive than the mere completion of environmentally related assignments. Formal directives from superiors are less central and less problematic while difficulties in the relationship with significant cooperative partners are seen as more important. When formal directives and authoritative delegation of responsibility are not perceived to be the solution to the problem, consensus and mutual interests become more significant.

This argument concerning the principle roles throws light on our observations from the questionnaires that people from different national agencies interpret their tasks differently – to define and implement objectives and to create networks. It is remarkable that, in reply to the question, "What were the central tasks involved in this context?", no one said that *both* definitions of objectives *and* the creation of networks were important tasks. People at eight agencies believed that the most important aspect was the closer definition of objectives and assignments. We interpret this as a vertical orientation in the formal decision hierarchy. People at the same number of agencies stated that creating contacts and building networks are most significant: a horizontal orientation.

The perception of problems within the two groups from the agencies also follow this pattern. In the implementer group, there were three agencies whose representatives believed that ineffectual or ambiguous management from the Cabinet Office was the basis of the problem. One of these also felt that problems arose since the objectives were unclear. From three other implementer agencies, it was pointed out that they were waiting for the objectives (despite having assisted the Environmental Goal Committee in its environmental objective work during the period). The

two who claimed not to see any problems at all with cooperation within the sectors were also among the implementers. On the other hand, horizontally oriented agencies can be expected to see problems in cooperation with other actors and in insufficient consensus. Most of those agencies' representatives who stated that different perceptions of the situation or different interests could create problems in cooperation were to be found among the networkers. Five of the six agencies whose representatives stated that they had contacts with actors outside the public sphere in working with environmental objectives were among the networkers who might be expected to have extensive cooperation within their sectors.

Because the investigation is so limited, it is not important to state which agencies belong to which category. Nor is it reasonable to believe that each agency should exclusively devote itself to one approach or the other or that all the parts of the agency should share the same view. However, the precise definition of environmental objectives is highlighted as a primary task especially in the responses from agencies concerned with infrastructure or the environment, while personnel in agencies dealing with industry and private consumption see the creation of networks as primary. The county boards are involved to a great extent in creating environmental networks mostly within but also outside their county boundaries.

In general, national agencies have more contact with other agencies than with actors from the private sphere in work concerning environmental objectives. The exceptions include the agencies dealing with industry and private consumption - all networkers – which make most contacts with non-governmental actors and are the only agencies which have more contact with non-public actors than with other agencies. The county boards also have a broad network of contacts in general inside their counties.

To sum up, the difference in perception accounted for here expresses some tension, a procedural goal conflict, between the government's efforts to coordinate environmental policy and its desire for decentralisation. This is expressed in the emphasis placed from different agencies on different roles: the implementation role and the networking role. The next question concerns the situation outside the sphere of the agencies.

4.3 Non-governmental actors

We take up three aspects of the participation of non-governmental actors in environmental cooperation and sectorisation. Firstly, the contacts they have in this respect, secondly, the obstacles they foresee and, finally, differences of interests and in the perception of the general situation.

a) *Contacts*: Sectoral responsibility is based on actual or potential cooperation in the sectors entrusted with the task of tackling environmental problems. The actors concerned obviously have networks of contacts and are able to cooperate with other organisations. The question is to what extent these structures for cooperation are also appropriate for cooperation related to environmental problems. The questionnaire provides us with some material for examining what contacts the non-governmental actors have in their work regarding environmental objectives and to what degree they feel the need to extend these contacts.

The majority of contacts occur with national agencies (28 contacts), but also with environmental organisations (7), the actors on the labour market (6) and universities and colleges of higher education (4).

Non-governmental actors have most contact with the national agencies for the environment and infrastructure. They also have contact with the Government Offices and the agencies dealing with agriculture, forestry and other issues. Non-governmental actors are favourable towards the development of contacts both with government and private bodies in addition to the networks they already have but are most interested in contacts with national agencies, including the Government Offices.

These contacts often take the form of consultations and information provided by national agencies to non-governmental actors but information is also provided in the other direction, from non-governmental bodies to national agencies.

It is surprising that the non-governmental actors responded that they have relatively little contact and are not planning to extend contacts with their own industry organisations and companies in environmental work. Instead, they report a high degree of cooperation with national agencies, environmental organisations

and the actors on the labour market instead. The considerable amount of contacts with national agencies is explained by some of the non-governmental representatives by the fact that information of how the government plans to act is necessary for commercial survival, while the national agencies do not have to rely on the private sector. We also noted that the agencies cooperate more with each other than with non-governmental actors.

In an actor perspective, this would lead us to conclude that within the sectors there is no automatic and regular cooperation regarding environmental objectives. Nor does there appear to be any strong desire to develop cooperation horizontally within the sectors. Non-governmental bodies seldom consider themselves part of a sector. This suggests that non-governmental actors often feel that they are part of a vertical process and that work on environmental objectives is primarily seen as a government matter.

b) *Obstacles in the way of cooperation*. Almost all the non-governmental actors believe that there are obstacles in the way of cooperation concerning environmental objectives. The most common obstacle described is the different perceptions of reality and different interests of the participants. Lack of resources is also mentioned along with unclear objectives. Other responses (unclear organisational conditions, lack of interest, insufficient legislation and insufficient support from the EPA and other national agencies) are not widely voiced. In comparison, the national agencies mentioned tangible obstacles such as a lack of resources (most common) and insufficient data along with unclear governmental demarcation of work areas.

The difference of interests and in the perception of reality seen as an obstacle to cooperation by more non-governmental actors than agencies. We have therefore attempted to examine the question further in telephone interviews with those who mentioned these factors in their responses. The arguments vary but a general attitude from those within the business sector was ' the state decides – we pay', even though some information officers felt that environmental policy did not imply increased costs for enterprises. The sacrifices mentioned are of two (partly contradictory) types. Partly, ambitious Swedish environmental policy can lead to costs for enterprises, in the form of closures for instance. Partly,

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enterprises may be prevented by state regulations from conducting the environmentally friendly projects which pressure from consumers would otherwise have led to; the market is, in this case, seen as more environmentally friendly than the government. It is beyond the scope of our investigation to go into this central question more closely which is clearly an important issue not only for sector work, but also for environmental policy as a whole.

A further view presented was that the state often lacks awareness of the actual conditions within the business sector. It was also felt that national agencies were frequently unclear and badly coordinated. Outside the government sphere, the great number of agencies, each with their own requirements, were seen as a very complicated mechanism which was difficult to satisfy. It was recognised that the organisation of the government was difficult to change fundamentally but it was pointed out that certain improvements could be made. For example, it would be easier to reform the state budgetary system in order to simplify the presentation of the content and aims (we will return to this in 5.2).

A small organisation said that the state expects too much of the ability of associations to participate in environmental work. There is a tendency among organisations to jump on the bandwagon when invited. It is then difficult to find the time and resources to pursue this interest at the same time as competence is considerably narrower among small organisations than among the cooperating partners on the government side.

c) *Role perceptions*. Probably the perceptions among non-governmental actors of the factors which make cooperation difficult, such as different interests and interpretations of the situation, depend on which sector they belong to since conditions differ between the various sectors. Our material is too limited to draw any definitive conclusion about this. We can, however, make some observations.

The image of non-governmental actors attaching greater weight to these factors than national agencies is modified when we distinguish between implementers and networkers. According to our material, the non-governmental actors in the implementer sectors are more inclined to see differences in the perception of reality

and interests as obstacles to cooperation on environmental objectives than the actors in the network sectors. This can be seen from the table summarising the views of the 29 non-governmental actors who expressed an opinion concerning obstacles for this cooperation and who can be classified among a specific sector (this cannot be done, for example, for environmental organisations).

Table:
The differences in views concerning obstacles to work on environmental objectives

Non-governmental actors	state different interests and perceptions of reality as obstacles for work towards environmental objectives	do *not* state different interests and perceptions of reality as obstacles for work towards environmental objectives
in sectors with implementers as the agency responsible	14	5
in sectors with networkers as the agency responsible	4	6

The table shows that the majority of those (14 out of 18) who feel that different interests and perceptions of reality are obstacles for work with environmental objectives, belong to sectors with implementers as the agency responsible. It is surprising that personnel at the implementer agencies generally did not believe that different interests and perceptions of the situation were obstacles while the majority of 'their' actors from the private sphere felt that such was the case! National and private participants on the network side were more in agreement with around half of each group feeling that such factors were important.

Nevertheless, it is difficult to draw any firm conclusions from the table. One possible explanation might be that the agencies with an implementation attitude tend to be less receptive to other actors, a fact which may lead to conflict, while the network strategy increases mutual understanding and mitigates conflict compared with the implementer strategy. It may also be the case that the different internal structures of the sectors lead to network and implementation strategies being applied in different cases, in the same way as the specific environmental objective

most important to each sector varies. We would also like to point out that several other conditions can influence the way in which an agency fulfils its environmental obligations; familiarity with environmental work and the background of the personnel may be contributing factors to name but two.

It has not been possible to identify further significant differences between the two groups of non-governmental actors in the questionnaire. For instance, it might be assumed that those who believe that different interests are important obstacles to sector cooperation also work with these issues. However, the actors are involved to a similar extent in goal conflicts and costs for environmental protection regardless of whether they belong to sectors with implementers or with networkers.

During the telephone interviews with those who felt that different interests and perceptions of the situation were obstacles in the work towards environmental objectives, we took the opportunity of asking about how they looked on the role of the state. Both the roles of implementer and networker were felt to be justified among actors from all sectors. A few actors (with implementers as the sector agency) stressed that the agencies should issue clear directives rather than cooperate within networks. One reason being that in this way, it is possible to establish clear rules of procedure and avoid disrupting competition by favouring some companies more than others. Other actors, with both types of national agency as sector agencies, felt that there were too many regulations and that there should be more contact and consultation with enterprises and other organisations. Some other views were that:

- Work with sector goals is moving in the right direction and this indicates some progress of environmental work.

- The EPA risks losing competence when the sector agencies take over more of the environmental responsibilities.

- 'You have to get together and talk it through and eventually you might get somewhere, perhaps nothing major, but still.' (Large organisation)

- 'We have talked and talked but nothing has happened. Now we are wondering if we should carry on being involved.' (Small organisation)

4.4 Some conclusions and recommendations

Our investigations show that environmental objectives and sector work can be interpreted in different ways. In previous reports[6] the EPA has shown that 'traditional' goal conflicts between environmental objectives and other welfare goals (external goal conflicts) and between the different environmental objectives (internal goal conflicts) are an important difficulty in sector integration. In this report it is apparent that also procedural goal conflicts arise, in other words, conflicts between the need for the central coordination of environmental policy and the wish to make best use of the competence and involvement of individual actors. The far-reaching decentralisation of Swedish government administration brings this issue to the fore, as we have illustrated here. At the same time it permits more flexible solutions to the issue of responsibility in different cases than would be the case in a more centralised system of government administration.

Even though we cannot eliminate such procedural goal conflicts, we can still do quite a lot to reduce their significance and discover flexible solutions on condition that an awareness of these issues exists. It may be helpful to offer some recommendations to the agencies for further work on environmental objectives and sectors:

- Each agency should consider the most suitable strategy for its own work on environmental objectives and sectors. The government has not enough information about the working conditions within each sector to be able to issue directives on the strategy to be chosen in each individual case. The government may have initiated sector integration after the decision on sectoral responsibility but it should not control the subsequent process in detail.

- Agencies should strive to improve contact with their sectors. This includes listening to information and wishes from non-go-

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[6] 'Goal conflicts and instruments' (EPA report 4800), 'Are we achieving environmental objectives?' (EPA report 5007) and 'Coordination and goal conflicts' (EPA report 5008) – all in Swedish.

vernmental organisations so that environmental protection does not become solely a government concern. It is especially important to increase awareness of the characteristic traits of each sector, in particular in the form of different interests and different perceptions of reality.

- It is important that the agencies coordinate their contacts with the business sector and local authorities so that environmental policy can best be rendered compatible with other policy areas. Government directives should not be internally contradictory.

- Different obstacles in the work with environmental objectives should be noted during contacts outside the government sphere and the government should be made aware of them. This is particularly relevant for goal conflicts and costs incurred as a result of environmental work (see the next section).

In this report we have not discussed how far the agencies should proceed in working towards sustainable development (see section 3.3).

5. Information and decisions

IN THIS SECTION, WE LEAVE THE RESULTS of the questionnaires and interviews, and instead discuss some issues of principle concerning the information required if environmental objectives are to function.

Both policy instruments and information are needed in order to implement sectoral responsibility. To enable environmental policy decisions to be made in a democratic process and on the basis of sufficient background research for an informed decision, certain requirements are placed on the decision-makers and the information system. We restrict ourselves in this section to two parts of this issue, namely, to the demands placed on the information from the agencies to the government (section 5.1) and to the government's budgetary control of the agencies (section 5.2).

5.1 Information about alternatives

Discussion sometimes arises about whether there is one desirable environmental condition or whether a choice has to be made between several alternative sustainable environmental conditions for each environmental objective. The current state of research seems to support the position that there are alternative conditions in the environment and in society. This means that harmful environmental effects should be avoided to a greater or lesser extent, even though there may occasionally be clearly decided limit val-

ues (known as bifurcation points) where development either becomes sustainable or unsustainable. This implies that environmental decisions normally refer to the balancing of different objectives. In brief: environmental policy should generally apply 'more or less' rather than 'either or'.

It is therefore natural to discuss and describe alternatives before deciding concrete environmental objectives (sector goals and targets). If this, at some point, appears unreasonable, it should be necessary to explain the reason for ruling out alternative objectives in favour of a single, unambiguously decided objective. If describing alternatives becomes normal practice, this would compel explanations for the proposal of exactly one emission limit or exactly one level of ambition for the conservation of natural resources and biological diversity. There are also powerful democratic reasons for accounting for alternatives since the decision-making processes of the government should be as transparent as possible.

The need for presenting alternative environmental objectives is especially great in cases where conflicts occur between environmental objectives and other goals, or between different environmental objectives. It then becomes unavoidable to take up a position on how much of an environmental objective we should give up for the achievement of another goal. We noted above that conflicts are relevant issues which should be discussed more within the sectors.

In the government environmental documents examined, however, the presentation of alternative environmental objectives is an exception. In general, no alternatives are presented and so there are no alternative cost levels either for targets or sector goals. Nor are ecological reasons given for not presenting any alternatives. The newly submitted report from the Environment Goal Committee 'The Future environment – our common responsibility' does contain alternative objectives along with the costs associated with them.

We recommend that the sector agencies regularly report alternative objectives in future discussions and reconsideration of the environmental objectives, along with the environmental consequences they imply. Moreover, the costs and sacrifices associated with each alternative should also be presented as well as their

earnings and advantages. We are of course well aware of the difficulties involved in doing all this.

The EPA has earlier emphasised that sector agency work is made easier if the criteria for handling unavoidable goal conflicts is made clear at an early stage. If politicians do not present such criteria, environmental decisions run the risk of being delegated, in practice, to public servants at the agencies. In conflicts between different environmental objectives it is important to decide which environmental problems are most pressing. In conflicts between environmental objectives and other welfare goals the issue becomes an ethical one. If we are able to discuss such considerations before the most urgent problems arise we will be able to establish a better foundation for acting quickly.

5.2 The budgetary system and environmental objectives

Networks and coordination are not sufficient to ensure that environmental objectives become a natural part of the activities of agencies and other enterprises. It is also necessary to integrate environmental considerations in the economic decision-making process. Ecological aspects can then receive as much attention as social and economic factors.

Work is underway to this effect in Sweden as well as in other countries. Environmental management systems and environmental impact assessments are currently being introduced in several contexts. Work is also going on to devise a green GNP in the national accounts with the purpose of observing the costs of environmental damage. However, it has proved difficult to state these costs with sufficient precision, and that has so far prevented the green GNP from leading to any practical results.

A fourth but little noted method of integrating environmental thinking in economic decision-making, is the use of the state budget as an instrument for controlling goals. Environmental objectives should not only represent verbally expressed wishes but should also be integrated in economic control systems. But also in

this respect, it is difficult to link environmental objectives to the economy. This situation reduces the potential for using environmental objectives as instruments for the activities of the agencies.

The Swedish state budgetary system mainly consists of budget proposals from the agencies, the government's Budget Bill, the parliamentary budget decision, appropriations directions and various follow-up elements such as the annual reports from the agencies and public statistics. The budget decision in Sweden was previously very detailed and controlled the use of resources by national agencies in great detail, including the number of employees and their salaries, the rent for premises and expenses such as for overseas travel and representation. During the 1970s and 1980s, there was an increased progression towards budgetary control which means that the agencies receive money for their functions (such as the administrative tasks required of the agency, environmental monitoring, liming and so on) so that they can decide themselves how much they can afford in terms of salaries and other expenses. In some cases market controls are applied, where market demands decide the extent of activities as in the examples of cartography functions and business enterprises.

Another form of budgeting is goal management. It means that the agencies receive money for different goals and then decide how the goals should be achieved within the framework of the budget. This does occur in some instances within the national budget. Environmental objectives, however, have not become subject to goal management within the budgetary system. The Swedish EPA's appropriations directions contain, in addition to specific tasks requested by the government, the allocation of funds in the form of an overall allocation for the administration of the EPA, environmental monitoring, measures for the conservation of biological diversity, the cleaning up and renovation of polluted areas along with environmental research.

Goal management in this context would mean that the government stipulated how much each target or sector goal should cost, or more accurately, what the measures for the various environmental objectives should cost (within each sector) after which the EPA and other sector agencies would decide how best to use the money. The government would be interested in the achievement of the environmental objectives rather than how much money

was spent on different functions such as environmental monitoring or environmental research.

If we add the costs of achieving targets and sector goals, we arrive at the total cost of environmental policy. In this way, it would be possible to compare the cost of environmental policy with the cost of other policy areas.

It would be very difficult today, as we have pointed out, to introduce goal management by means of the national budget within the environmental field since the agencies report too briefly on proposals for measures and cost calculations. Developed goal management by means of the budget also requires the existence of a system for financial follow-up which has yet to be developed. Moreover, goal management becomes complicated when several agencies are working on the same environmental objective.

In a better constructed system - including environmental objectives with alternative objectives and packages of measures as well as cost calculations for each alternative - an increased degree of goal management by means of the national budget would have a number of advantages. For instance, politicians and the public would know what benefits and sacrifices each environmental objective was associated with and would therefore be able to decide on informed priorities between objectives, and even decide in a tight budget situation between environmental objectives and other social welfare goals. In the long term, we should build up an information system which would enable goal management to be introduced in the environment sector. Environmental objectives would then be more operative than they are now.

Goals and sectors
Issues in environmental policies

ENVIRONMENTAL QUALITY OBJECTIVES and the responsibilities of different sectors of society are important issues in current Swedish environmental policies. The various national agencies are playing an important part in defining both objectives and the meaning of sectoral responsibility, and there is a vision of a broader participation by other societal actors as well: communes, trade organisations, enterprises, environmental organisations etc.

This report shows that environmental work in Sweden to a large extent depends on the constitutional set-up with independent national agencies. The agencies are free to interpret and implement their roles in different ways. Interesting differences in this respect are high-lighted in the report, in particular the tension between a centralised and a decentralised decision-making. Also, national agencies and other actors often disagree on what are the main obstacles to environmental cooperation: a lack of resources or conflicts of interest.

These and other observations give important insights into how environmental objectives and sectoral responsibility work in practice. Such insights are indispensable for developing and improving the on-going environmental integration.