13. The Danish communes: Capacities and constraints in environmental management

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No 'Invisible Hand' can be relied on to produce a good arrangement of the whole from a combination of separate treatment of the parts. It is, therefore, necessary that an authority of wider reach should intervene and should tackle the collective problems of beauty, of air and of light, as those other collective problems of gas and water have been solved.

(Pigou, 1932: 195)

1. INTRODUCTION

Local authorities still play a significant role in the implementation of national environmental policies when looking at the situation in terms of local environmental administrative tasks and resources. Basic services with regard to pollution control (wastewater treatment, waste management, nature protection) administered locally in the majority of EU countries account for 80–90 per cent of total public expenditure directed at environmental policy. Efforts to integrate environmental policy into other policy sectors have, moreover, led to further local authority involvement. For example, the restructuring of EU agricultural policy has been increasingly based on local area planning and has, thereby, been placed within the realm of local and regional authorities.

Having acknowledged this fundamental role, a tendency in favour of new types of management instruments exploiting channels other than those of local authorities is to be observed over the past decade. These comprise market-based instruments, such as environmental taxes, voluntary agreements, producer responsibility schemes, environmental certification, environmental auditing and environmental impact assessment (EIA). These new management instruments have been criticised for pushing genuine local environmental administration into the background. When, for example, a voluntary agreement between the government and one or more industry

(Mørch, 1982). The poet, priest and educator, N.F.S. Grundtvig, was a main inspiration for the farmer's movement. A Conservative government dissolved Parliament with a rule by decree in the 1890s; however, the farmers eventually seized power in both Houses of Parliament in 1901. Since that time, profound scepticism among farmers directed against Copenhagen has given way to a marked decentralisation of competencies to local authorities in the majority of public services. A further source of inspiration for decentralisation came from German town governments, ~~moreover~~ (Gunlicks, 1986). As workers and Social Democrats had outnumbered farmers by the 1930s, the preference for local self-governance had become institutionalised and the tradition for delegation was continued – also thanks to the influence of the landholders' party, the Social Liberals.

Denmark has been acknowledged to have had a profound degree of environmental change during the 1990s (OECD, 1999). The domestic expansion of windpower, a unilateral carbon energy tax and an activist approach at the international level helped increase Denmark's reputation as a pioneer in sustainable development. Yet, more analytical comparisons on basis of extensive environmental datasets have frequently ranked Denmark well below other small European states, when attempting to measure environmental performance (Scruggs, 1999). CO₂-emissions per capita in Denmark are in fact similar to the level in the USA, a key reason being the fossil fuel-based power generation sector – with utilities under municipal ownership. That there are strong vested interests at the local level, which tend to counterbalance the pioneering tendencies in national environmental policy-making, will be further spelled out in this chapter.

2. SOME GENERAL REFLECTIONS ON THE CLASSICAL ISSUE OF CENTRALISATION VS. DECENTRALISATION

The question of which roles local and national authorities should play in environmental management represents a classic problem. Environmental problems were from the outset conceived as issues that are inherently *local* in their nature. Pollution affects local watercourses and rivers, and lack of sound waste disposal impacts the countryside. As an area of *low politics* it has been customary to entrust environmental responsibilities to the lowest level of public administration. Yet, factors which challenge the wisdom of this approach have been present long before globalisation of environmental policy-making emerged.

Nigel Haigh (1994) has described how, when England adopted its (and Europe's) first air pollution law in the 1860s, a wide and lively debate

unfurled among legislators and experts regarding the appropriate level of authority. One approach was that local authorities should constitute the responsible administrative level, as they had been in relation to the, then, Hygiene Law. Another approach felt that a national air pollution inspectorate should be set up, in the same way that, in 1833, a factory inspection body had been established. A careful compromise resulted; the local authorities were to be the responsible authority except in the case of technically complex installations, for which a national air pollution inspectorate was to be established. In this way, shared responsibility became the norm for air pollution regulation in England.

This discussion and outcome could be interpreted as a result of the rather centralised administrative tradition of imperial Britain, and hence as a deviant case of less relevance for generalisation. Yet, even in countries with a federal/confederate administration, the early assignment of environmental powers was not unequivocally ~~always~~ in favour of local municipalities. In the former Prussia, use of the local authority level to regulate sewage discharges into the Rhine and the region's other waterways had, in fact, already been abandoned by the turn of the last century. Towns situated upstream on the larger rivers did not take sufficient interest in establishing treatment works, with the result that surface and drinking water in towns lower downstream was spoiled. This tendency prevailed despite the fact that around 1870 early technologies had ~~already~~ been developed for the treatment of wastewater. A landmark court ruling in 1904 against the town of Essen led to a new assignment of competence. Local municipalities were required to hand competencies over to regional administrative structures, and a system of regional water catchment management was established. The new and independent authorities began to manage water pollution financed by discharge levies, moreover in direct cooperation with industry.

These two examples indicate that it may be misleading to conceive the assignment of environmental powers as an issue which has only surfaced in recent years. The lively debate that has taken place in the EU regarding the subsidiarity principle in environmental management has indeed early precedents, though defining reasonable administrative boundaries and distinguishing between which environmental issues should be administered locally and which at regional or national level remains, ~~of course~~ a thorny issue. The subsidiarity principle would seem to imply that local authorities should take responsibility for local environmental problems, regional authorities for regional problems and national authorities for national problems – while the EU as a supranational institution should occupy itself mainly with transboundary environmental problems. Yet, these spatial divisions are challenged by asymmetry between the beneficiaries and the burdened in issues of environmental protection, and may explain why the EU

mandate from the local electorate. Precisely this political legitimisation leads, through national legislation, to local authorities' being allowed certain discretionary powers to weigh up the national requirement against prevailing local conditions. These discretionary powers can, however, vary a great deal.

In the literature, two types of implementation methods are distinguished from each other; the structured and the adaptive approach (Berman, 1980). In structured implementation, national legislation typically regulates local authority behaviour in detail, for example, via establishment of binding standards, deadlines and procedures. In adaptive implementation, national legislation simply establishes the framework for local authority activities, leaving responsibility for filling in the detail with the local authority, itself.

with The structured approach is typical for federal systems and can be illustrated by the USA's Clean Air Act, where Congress, in an attempt to avoid 'capture' of the regulatory authorities, described the legislation in minute detail. The law, in fact, prohibited the American Environmental Protection Agency (EPA) from negotiating with interested parties, and mandated it to establish purely health-based requirements for the air quality level to be achieved locally. In the field of the environment, the structured implementation method is most frequently observed in federal systems, where several layers of regional and local authorities coexist. The approach seems to reflect an attempt on the part of the legislator to minimise the risk for lost focus under implementation. For this reason, the structured implementation method is also apparent in the Federal Republic of Germany, just as a number of detailed EU environmental Directives can be seen as an expression of this method.

With adaptive implementation, more popular in small unitary states, only a framework for the local authority's regulatory tasks is legislated for. Legislation establishes an organisation, an allocation of authority between the authorities and some general principles for the local administration, but leaves it with the regional and local authorities, potentially in cooperation with each other, to manage the more detailed implementation and explicit details of the legislation. The Danish Environmental Protection Law represents a typical example of such an adaptive implementation through broad framework legislation, where various stakeholders have also had the opportunity to play a key role in establishment of environmental protection. National standards for emissions of harmful substances have primarily been in the form of optional guidance notes, and it has been left to the local authorities to evaluate these against the prevailing conditions in the local receiving environment. This differs from the German approach, where standards for Best Available Technology are fixed by the regulators at

the opportunity to finance staff for certain environmental management tasks via a special charging scheme, the report reveals that only a small group of municipalities charged what was required for inspection. The Environmental Protection Act foresees concurrent inspections of highly polluting companies; however, with more than 500 companies per inspection officer, several years can go between inspection visits. Municipalities also have responsibility for controlling farms' compliance with national regulations on the storage and application of fertiliser. In this area, it can be especially difficult for rural municipalities to apply an effective agricultural inspection, as farming interests will often feature strongly in the respective municipal board and its technical committee. It has been reported that current status with regard to agricultural regulation is characterised by 'black spots' on the map, where municipal inspection shortfall has reduced implementation of fertiliser regulations.

In my study of water pollution control policies in four European states, the municipal approach in Denmark was contrasted with the Waterboard approach in the Netherlands. In the latter case, responsibility was delegated to single-purpose entities, founded on stricter application of the polluter-pays principle. In terms of environmental change from 1970 to 1990, the Netherlands were far more successful than Denmark in reducing pollution at source. The municipalisation of environmental responsibility had led to over-investments in expensive end-of-pipe treatment in Denmark, and in a slow and modest curbing of water pollution discharges as compared to the Netherlands (Andersen, 1994; 1999). A recent update of the study has largely confirmed the findings of the initial analysis (EEA, 2004). 2005

Table 13.1 provides an overview of the outcomes of centralisation/decentralisation trends in Danish environmental politics in recent years (1990s). Danish membership of the European Union has favoured a certain centralisation, due to the large number of EU directives that have to be implemented in national legislation. Yet, the local authorities (either municipalities or counties) remain largely in control of inspection and enforcement at the local level. The only real exception to this pattern is forest policy. Implementation and enforcement, above all, is a task for local authorities, where the state mainly becomes involved in cases of judicial complaints.

5. THREE ASPECTS OF THE LOCAL MANAGEMENT PROBLEM

The implementation problem of the local administration can be related to three analytically distinct issues; the problem of scale, the subsidy issue and the capacity challenge. While the first two types of problems have been

where a large part of industry has, on its own initiative, undertaken ecological modernisation. This ecological modernisation process has, itself, a significant dynamic in that one of the driving forces is companies' own desire to win strategic advantage by operating at the cutting edge of public regulatory requirements.

Classic command-and-control regulation is built partly on technology-specific norms and standards, set down by authorities from their knowledge of what is available and possible, and partly, to a large extent, on public authorities' taking the responsibility on themselves to treat and neutralise residual outputs from production focusing chiefly on point sources. Use of local authorities as implementation bodies was part of this reactive, end-of-pipe regulatory paradigm. Local authorities could put passive solutions into action to treat the industrial stream of residuals, but not put in place a preventative environmental policy.

During the 1990s, more focus has been on the significance of diffuse pollution sources and, in the same vein, broader circulation and life-cycle schools of thought have developed. As Albert Weale puts forward in his characterisation of this 'new politics of pollution', which builds upon a realisation that the causal interaction and the effects of pollution problems are wide-reaching and complex, necessitating a preventative, anticipatory approach rather than clean-up and reparative approach. This new view of environmental regulation builds on the mass balance approach where the environment is not regarded as a sectoral problem, but as an element which needs to be integrated into other policy areas. In a narrow sense ~~the~~ ecological modernisation process would dictate that environmental protection should be directed at the source and be integrated into production processes, but in the wider sense it implies a need for structural changes in industrial society (Weale, 1992).

The concept of ecological modernisation has been interpreted in different ways; however, it refers basically to the necessary modernisation of industrial society on the basis of sustainability (Mol, 1995; Andersen, 2002). The concept has developed over time as it has become clear that the 'old' environmental policy – where concern for the environment was regarded as being in conflict with economic development – has been replaced with new environmental policy, where environmental concern is regarded as a necessary precondition for a viable economic development. The realities of pollution, as well as the economic perspectives tied up with development of new environmentally-friendly technologies, have probably been equally significant for the advance of the new environmental strategic approach. Instead of regarding environmental policy as a potential economic burden, it is seen by the ecological modernisation school of thought as a source for continued development, although within a certain, not

These changes in the area proper to management have not, however, in general, been followed by the transference of the public utility industries to new public authorities created ad hoc; for the task of ousting the municipalities is opposed by an immense amount of friction, and is, therefore, little likely to be successfully undertaken. Hence, in practice, public operation often implies that industries, whose most economical area of management is intermediate between the areas representative of the central authority and of local authorities respectively, will, in fact, be worked by local authorities; and this, of course, implies a reduction of the unit of management below what is commercially best (Pigou, 1932: 402–3).

Efforts on the part of local authorities to retain the tasks they had won or had been awarded led to 'diseconomies of scale', and many tasks were, therefore, gathered on a more local level than would otherwise have been economically and technically desirable. Pigou took, therefore, a rather critical view of local authority organisation where local authority utilities, for example supplying water, gas and electricity, were concerned. This, in his view, did not result simply from local politicians' short-term outlook, determined by the next election or the potential to export externalities out over local authority boundaries, but first and foremost from the local authorities' lack of *ability* to produce collective goods efficiently in a bureaucratic organisation.

Pigou's favoured alternative to the bureaucratic organisation was special authorities managed by experts 'for the express purpose of industrial operation or control', who, in being appointed for a longer period of time, would be protected from blackmail from influential electoral groups. Among his favourite examples were such companies ~~and~~ the London Port Authorities, London's Waterboard and the United States' Interstate Railway Commission (Pigou, 1932: 334).

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Pigou's discussion of the scale problem can be thought to constitute a direct parallel to the situation in 1960's United States water resource economics, where Kneese and Bower (Kneese and Bower, 1968; Kneese and Schultze, 1975) criticised the local authorities' inefficiency, here in the more recent fight against pollution, not simply in Pigou's discussion relating to the classic utility company scenario. Use of special authorities was also advocated, founded on the basis of hydrological boundaries in the case of environmental protection. Kneese, who at the same time can be regarded as one of the instigators of the modern mass balance approach to environmental regulation, was aware of the German Wasserverbände in the Ruhr district, and put forward that these regional special authorities were more effectively suited to management of water resources than were local authorities and municipalities, whose boundaries were often arbitrary in relation to natural resources.

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