Planning of sea areas by local authorities: the Norwegian experience
Le rôle de la commune dans la planification marine en Norvège

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Abstract: The paper indicates some of the challenges facing local structure planning of sea areas since the mid-1980s, and asks what has been achieved. This question concerns the quality of plans as strategic tools. On the basis of theories of communicative and strategic planning, a framework of assessment is evolved round three main concepts: the legitimacy, the flexibility and the conformance of plans. The paper then examines planning problems, processes and achievements in selected fish-farming communes in West and North Norway.

Keywords: Norwegian marine planning - Theory - Assessment

Résumé: Cette communication identifie des problèmes de planification marine qui se sont présentés aux communes littorales de l'ouest et du nord de la Norvège depuis 1985, et elle s'interroge sur la qualité des plans comme instruments stratégiques. Sur une base théorique de planification communicative et stratégique, un cadre d'évaluation est élaboré autour de trois notions principales: la légitimité, la flexibilité et la conformité des plans. Finalement, des problèmes spécifiques, des processus de planification et des résultats dans deux communes aquacoles sont examinés.

Mots-clés: Planification marine norvégienne - Théorie - Évaluation

The aim of this paper is to discuss challenges and responses in coastal zone planning in communes on the fjord coasts of West and North Norway in terms of the quality of plans. This requires an approach that integrates the content and process of planning. To this purpose I shall form a conceptual framework that draws on theories of strategic and communicative planning. This will be used to evaluate a small selection of communal plans.

In the Norwegian system, planning by local authorities or communes is the main vehicle of spatial planning. I use the word planning in the sense of plan-making, as distinct from implementation or later decision-making. Coastal zone planning is defined as communal structure planning of sea areas under the Planning and Building Act of 1985. Planning under this Act is intended to coordinate state, county and communal interests and provide a basis for subsequent decisions concerning the use and conservation of resources and building development (Plan- og bygningsloven §2). There are important strategic implications in this wording (Bennett, 1996).

Norway has about 55,000 km of coastline and about 280 communes bordering onto salt water. Communes vary greatly in size from under 10 to over 3,000 sq. km. In October 1995, 101 (36 %) of them had approved coastal zone plans, 74 (27 %) were in various stages of the planning and 105 (38 %) were inactive. For further information on the background for and progress in planning, see Bennett, 1996.

The first years of coastal zone planning after 1985 were characterized by uncertainty and learning,
because:

- Norwegian planning itself was in transition. Theories of participatory and communicative planning were gradually gaining acceptance at the expense of a predominantly technocratic planning tradition. Planning law embodied the new ideas, emphasizing public participation, consultation and cooperation;
- planning of the sea was a new communal responsibility. There were no well tried models applicable to Norwegian reality. Many peripheral communes had a weak planning tradition and little or no expertise. County support and guidance was very variable;
- rapid changes were taking place in the planning environment. Several modern activities laid exclusive claim to space in an environment where mobile forms of use and common rights were traditional. Fish-farming in particular was expanding rapidly, placing increasing demands on space and the ecological quality of its localities;
- for many peripheral communes in the West and North the prime concern was to create jobs and incomes. The challenge of planning was therefore to ensure optimal conditions for the continued growth of fish-farming.

I - CONCEPTUAL FRAMEWORK

Any investigation of quality and achievements in planning needs to take account of the mode of planning, different modes lending themselves to different criteria of assessment. My point of departure, therefore, is two ideal types of planning: project planning and strategic planning. These can be regarded as ends of a continuum on which actual plans can be arranged. Project planning has its theoretical basis in the concept of instrumental rationality. Planning is conceived as a logical process of thought and action, the planner being assumed to have complete knowledge of the problem at hand and all possible solutions, among which he chooses the best alternative. This is consistent with a control view of planning or planning in the context of command (Faludi & van der Valk, 1994), reflecting the assumption that the plan will lead to the desired result. Project planning is usually the domain of experts and participation by others is limited. The appropriate mode of planning is the blueprint or physical plan. The planning process has a definite beginning and end. Ideally, goals are well defined and agreed upon, the implementation horizon is short and results are predictable.

Modern strategic planning theory is founded on the concept of communicative rationality, which is the rationality of democratic discourse free of domination (Forester, 1993; Dryzek, 1990). This has been termed planning in the context of accommodation. (Alexander and Faludi, 1989; Faludi and van der Valk, 1994; Healey, 1994) since its aim is to integrate all the diverse interests within the unit to be planned. Such planning is not directly concerned with material outcomes, but rather ideas about what places, spatial arrangements, etc. should look like in the future. Its purpose is not to dictate outcomes, but to provide frames of reference for and guide subsequent detailed plans and operational decision-making. Planning is a continuous process in which the plan itself represents a momentary record of agreements reached. Its timing is vital to the interests of the participants, who usually want to keep options open (Faludi & Korthals Altes, 1994).

The power of a project plan depends, among other things, on: a - the clarity of its objectives, b - its theoretical soundness, c - its legal status and d - relative stability in the planning environment (Mazmanian & Sabatier, 1983). The test of a good plan is the degree of conformance between initial goals and actual substantive results (Faludi & Korthals Altes, 1994). This can be operationalised in terms of correspondence between the spatial system of the plan and the structure of actual area use after implementation. The power of a strategic plan, on the other hand, depends on the extent to which actors have a feeling of ownership to it (Amdam, 1995). This depends on: a - who participates and when, b - the type of communication and degree of influence of participants, c - that participants can define their own strategic interests within the symbolic content of the plan, and d - the open-endedness and flexibility of the plan. Faludi & Korthals Altes (1994) contend that strategic plans should be evaluated in terms of their performance, a concept that refers to the plan’s usefulness in informing or guiding subsequent decisions.

Since Norwegian communal structure plans combine elements of project with elements of strategic planning (Bennett, 1996), we need to use different criteria of assessment. I propose three criteria: the first two are performance criteria applicable to strategic plans and the third is the conformance criterion applicable to project plans. The first is legitimacy, the achievement of which depends on a - how nearly practical planning approaches the ideals of communicative planning theory outlined above, and b - the substantive relevance of the plan. The second criterion is flexibility, which is directly connected with the idea that strategic planning “deals with the coordination of actors within a context of accommodation”, making room for different perceptions and interests among actors that “want to keep options open” (Faludi and Korthals Altes, 1994). A flexible plan could therefore be expected to show spatial arrangements in terms of broad categories allowing ample room for alternative choices of location of activity and changes in spatial requirements. Boundaries would be indicative rather than definitive, and would be open to adjustment when sufficient justification arose. The third criterion is degree of conformance in spatial terms between the results on the ground and the plan itself.
Armed with these criteria we shall now proceed to assess 2 coastal zone plans. Here, my main source of information is graduate student theses produced under my supervision, supplemented with later interviews with representatives of the communes. The Averøy case builds on the work of Kjørsvik (1994) and that of Herøy on Astrup (1993).

Fig. 1. Norway, with approximate location of the communes, Averøy and Herøy

II - THE PLANNING CONTEXT

The two communes of Averøy and Herøy lie on the outer coast (Fig. 1). Each has a very long coastline. Herøy has over 1 500 islands and skerries. Averøy is less fragmented. They are typical peripheral communes, heavily dependent on fishing, fish-farming and related activities. In both cases coastal planning is strongly related to fish-farming, although other interests also demand attention, e.g. fishing, nature conservation and recreation. In the latter part of the 1980s most fish-farms were located in sheltered sounds and land-locked basins, several in sub-optimal localities (Fig. 2A and Fig. 3A). Over-crowding was causing pollution and fish-health problems with negative consequences for production. The communes decided therefore to make plans primarily in order to offer new localities with better carrying capacity. There were also conflicts with other users over space and environmental impacts. In Herøy in 1989, there was a serious outbreak of infectious salmon anemia (ISA), which necessitated a rigorous program of slaughtering, farm clearance and disinfection. Most of the commune was laid fallow for a year (Fig. 3B). The planning problem then became how to achieve a completely new, "healthy", locational structure when farming was reestablished.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Averøy</th>
<th>Herøy</th>
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<tbody>
<tr>
<td>Total population, 1 Jan. 1990</td>
<td>5 618</td>
<td>2 094</td>
</tr>
<tr>
<td>Total number of employed, 1990</td>
<td>2 648</td>
<td>842</td>
</tr>
<tr>
<td>% employed w. fishing main source of inc. 1990</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>% of employed in fish industry, 1988</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>% of employed in fish-farming, 1988</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Average value of catch, 1986-89. NOK mill. (1990)</td>
<td>64.6</td>
<td>13.4</td>
</tr>
<tr>
<td>Number of fish-farming units, 1988</td>
<td>16</td>
<td>21</td>
</tr>
<tr>
<td>First hand value of reared fish sold. NOK mill. (1988)</td>
<td>61.4</td>
<td>90.7</td>
</tr>
</tbody>
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Table 1. Key statistics for the communes of Averøy and Herøy.
The figures are given for the late 1980s and early 1990s as this is relevant to the planning context. (Source: Database compiled by K. B. Lindkvist from official Norwegian statistics).
III - PLANNING RESPONSES

A - The plan for Averøy

The Averøy plan (Fig. 4) was made in two stages; a plan for the inner fjord coast was started in 1987 and then a plan for the outer skerry coast was started in 1989. Both were passed in 1990. The former is the more interesting and is described here. Its real aims were to assess sea areas for fish-farming and provide a framework for relocation of the industry. The explicit intentions were to optimize use of resources, minimize negative impacts and conflicts, improve local control over development, and facilitate public administration. The project was cheap and expedient.

A consultant was employed temporarily to collect information and produce a draft plan. The executive committee of the commune functioned as planning board. The general public and relevant local organisations were informed that planning was to commence and invited to provide information. Local fishermen recorded their interests on maps.

There were also informal contacts between the planning consultants and the fishermen and fish-farmers. Over and above this there was no direct public participation in the planning process. Sector interests at county level were informed, but not consulted. The consultant and the board were of the opinion that they themselves possessed enough knowledge to do the job. The final draft was presented for public inspection in the usual way.

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The local people themselves arranged two protest meetings. The first demanded more democratic planning, and a signature campaign was started against fish-farming in the fjords. The second demanded that the plan should be stopped until water-quality tests had been carried out in the fjords. The commune, however, chose to ignore both. The draft plan also drew a number of formal objections that took a year to deal with. The main protests were related to size of fishing grounds and fears of pollution from fish-farming. These fears were disregarded as groundless.

This planning exercise has many of the characteristics of top-down, project planning. Its real objectives were clear and limited and the implementation horizon was short. When fish-farming was relocated, the real aims were largely achieved (Fig. 2B). Sufficiently large areas of the inner fjords were left open for fish-farming to be able to accommodate so-called disease-hygienic units where farming rotation is practised. In this respect the plan achieved an element of flexibility. The fish-farmers felt that their interests had been well taken care of, even though they had not participated in the process. The fishermen on the other hand were less pleased with final spatial arrangements. The local people were dissatisfied with the authoritarian nature of the planning process, they feared pollution and had doubts about the validity of water quality estimates. The attitude of the commune was that it had satisfied legal requirements regarding public information, that the plan was scientifically well founded, and that protests and conflicts were largely unwarranted.

All things taken into consideration, the plan was successful on conformance criteria; no major adjustments have been made. Its scope however is too limited for it to be classed as an integrated coastal zone plan. It is doubtful whether the plan carries legitimacy with actors other than the fish-farmers and a small circle of communal politicians and administrators. Some flexibility was achieved with respect to the needs of fish-farming in that large areas were reserved for the purpose.

B - The plan for Herøy

Herøy made its first planning attempt in 1985, but the plan was never adopted for formal reasons. After the disastrous outbreak of ISAn in 1989-90, the commune embarked on a new planning process. Its aims were ambitious: a - to realize the whole production, income and employment potential of fish-farming licences held by local owners, b - to encourage organized cooperation and use of new technology, c - to hinder the spread of disease, d - to protect traditional fishing localities, and e - to preserve natural and cultural heritage values. The plan (Fig. 5) was to be a strong regulatory tool, enabling local control of the location and movement of fish-farms. In fact Herøy was attempting to gain strategic control over resources within its own boundaries.

From the start, the commune prepared a broadly democratic program of participation and consultation in which practically all interests in the coastal zone were represented. The organizational plan included 5 strategic planning arenas: a - Planning board consisting of the commune's executive committee, b - Control committee - 3 politicians and chief administrative officer, c - Project group - project leader, representatives of different communal sectors, fisheries
consultant and veterinary officer, d - *Internal advisory group* - representatives of the fish-farmers, fishermen, leisure and tourism interests, and landowners, e - *External advisory group* - representatives of county and state authorities. In addition to meetings within the project organisation, there was much parallel activity in the fishermen's and fish-farmers' associations which also contributed with much valuable data. As a result there were no complaints about the basis of information on which the plan rested and most actors were satisfied with the degree of participation. The fishermen and fishfarmers felt that the process contributed to mutual understanding and had cleared up a number of conflicts.

The commune succeeded to a large extent in forming an integrated plan for its coast, spatial relationships between fish-farming, fishing, nature conservation and recreation being ordered through negotiation and compromise. Fish-farming zones (Fig. 5) were divided into three or four sub-areas in order to enable separation of age-groups and to allow farming rotation. Relocation of fish-farms and measures to curtail disease met certain problems however. Firstly, the legal position was uncertain on the withdrawal of permits to farm in localities that had been temporarily vacated due to disease, so farmers had to be persuaded to move voluntarily. The atmosphere of cooperation achieved in the planning process helped a great deal in this respect. Secondly, the commune tried to introduce into the plan supplementary rules on fish-farming operations, disease control and transport between zones, but found to its frustration that the planning act did not provide a legal basis for this. Such matters are subject to special laws administered by various sector authorities. As the plan had to be ready before fish-farms returned for the 1991 season, there was no time to seek rulings from these authorities. An alternative solution was found using recommendations that were not legally binding. In this respect the commune did not achieve such a strong instrument of control as it would have liked, the plan being no stronger than agreement reached through the planning process. As it turns out, the strength of the plan has not been challenged. Owing to changes in ownership structures fewer farms returned to Herøy than expected. The zoning system provided enough room for all. Farmers realized that it was in their own interest to move to new localities and improve routines. There has been no disease for the past 4 years.

Superficially the Herøy plan might resemble a project with a well defined short term aim of clearing up the situation in fish-farming, which was realised. But it was much more than this. It balanced spatial relationships between conflicting interests, providing an ample framework for long term economic development. As regards fish-farming the plan has proved to be sufficiently flexible. Given the present state of farming technology it will probably perform well for a few years to come. The way in which the planning process was conducted is exemplary. A plan was developed to which many have a feeling of ownership and whose legitimacy is acknowledged by most actors with a stake in the coastal zone. There is an understanding between the commune and the main actors that no changes shall be made without consultation. This atmosphere of mutual respect and understanding was no doubt facilitated by the fact that Herøy is a socially and culturally closely knit community where people share the same codes of communication.

**Final remarks**

Our assessment of the two plans must be provisional. They have existed only a short time, and we do not have detailed data on performance or conformance. There is, however, sufficient evidence to demonstrate quite different types of planning response. The Averøy plan had little about it that was strategic. Its aim was to solve the immediate problem of relocating fish-farming. In this its was successful. Although Herøy had a similar substantive problem, this commune came nearer to strategic thinking, in its vision of what it wanted to achieve, awareness of its own position in relation the planning environment, and in its attempt to gain greater influence over its own destiny through control of important local resources and activities. The fact that it met institutional hindrances draws attention to the problems of planning law in relation to sector laws and underlines the importance of involving sector authorities in binding cooperation. Of the two planning exercises, the one in Herøy came closest to the ideals of communicative planning in its use of both formal and informal arenas of participation. For this reason the plan will probably perform well in the future.
Fig. 2: Location of fish-farms in Aversøy commune:
A - 1987-88, before the coastal zone plan
B - 1992, after adoption of the coastal plan

Fig. 3: Location of fish-farms in Herøy commune:
A - 1987-88, before the outbreak of ISA
B - 1990, after farm clearance
Farms are now located in aquaculture zones (see Fig. 5)
References


Fig. 4: Excerpt of the coastal zone plan for the whole of Averøy

Cahiers Nantais n° 47-48
Fig. 5: Excerpt of the coastal zone plan for the whole of Hersy commune

(Voir aussi Cahier couleur)
Fig. 5: Excerpt of the coastal zone plan for the whole of Heroy commune