

## CHAPTER 19

# SCIENTIFIC KNOWLEDGE AND PARTICIPATION IN THE GOVERNANCE OF FISHERIES IN THE NORTH SEA

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### Abstract

The participatory mode of fisheries governance is based on effective communications that are able to bring together the viewpoints of many stakeholders so that management decisions can be generated. This chapter offers a discussion of the relationship between stakeholder participation as it is taking place on a European scale and the generation of formal scientific knowledge for the management of fish stocks under the Common Fisheries Policy (CFP). It examines the demersal stocks in the North Sea in particular. Stakeholder participation has been an important factor leading to demands for changes on the ways in which formal scientific advice is generated and communicated. The impacts on scientific deliberations of three such demands are examined: a) a demand that advice shift from the fish stock to the fishery as its basic unit of reference; b) a demand that advice not be open to different interpretation by the various stakeholders; and c) a demand that the results of existing technical fisheries management measures be examined when preparing advice. The chapter concludes that a flatter decision making hierarchy could make possible both a richer knowledge base and greater public support for management decisions.

### 19.1 Introduction

The participatory mode in fisheries governance begins with a shared understanding of what is going on in the sea. Sharing such an understanding implies an approach to developing the scientific basis of management decisions that has itself, in some sense, been participatory. This idea should raise some eyebrows. Our common sense understanding of science, for good reasons, does not include the idea of 'participation'. Science is supposed to yield objective knowledge, not participatory compromises. The role of science in fisheries management is precisely to provide objective information about the situation that then can be used to make participatory decisions about responses to the situation. Participation, after all, is a polite word for politics, and science is supposed to be shielded from politics.

Jasanoff (2002) is one of a growing number of voices expressing an alternative approach to science and policy. While the West has spent the past 30 years developing institutions that are supposed to protect policy-relevant science from politics, she argues, this vision has never been achieved. Within every policy arena where science is relevant it has been continually re-entangled in politics. However, the world is changing and this entanglement is taking on different kinds of meanings. In the past, when totalitarianism and nuclear weapons were the defining images of science and technology, the danger

was a “monolithic alliance of science and technology with the state” (Jasanoff 2002:367). Now, however,

...it is the turn of civil societies to insist that the production of policy relevant knowledge should be made available for public scrutiny and input. To politicise science in *this* way – that is, by making it publicly transparent and accountable – is not the same as allowing science to be captured by the special interests of state and industry. Public accountability, carefully institutionalised, can only promote the interests of democracy. (Jasanoff 2002:368)

A clear case can be made for the application of Jasanoff’s reasoning to fisheries. The early post-war years were indeed often characterised by an overly close cooperation between the fishing industry and the agencies responsible for the assessment and monitoring of fish stocks (McEvoy 1986), so a ‘monolithic alliance’ justifying itself with biased science was a real danger. It is hardly a danger today. Fishers face regulatory agencies staffed by scientists who have strongly embraced the precautionary principle (Wilson *et al* 2002) and any openings for fishers’ participation in the scientific aspects of management could only conceivably exist within a civil society context in which marine conservationists would also have standing. Checks and balances would be in place that would allow Jasanoff’s (2002) public transparency and accountability to make a positive contribution to the accuracy and legitimacy of the science being used by management decisions. Hence, we do not see a problem stemming from the basic idea of civil society participation in fisheries science.

The question is how such participation should be achieved. We believe that one important key lies in understanding the relationship between the physical (and social) scale of what is being managed and institutions doing the management. There are numerous examples of a knowledge base for fisheries management being produced through cooperation between scientists and fishers on **small** scales that are perceived by most stakeholders as useful and legitimate (Wilson 1999). However, collaborative programmes dealing with **large-scale** fisheries have been much more focused on involving fishers in particular roles, often as data gatherers or reviewers of completed science, without achieving participation in a broad sense (Bernstein and Iuddicello 2000). In fact, in our assessment, social scientists do not know very much about how to ‘carefully institutionalise’ large-scale institutions to allow participation in science to ‘promote the interests of democracy’.

We examine aspects of the production of scientific knowledge for fisheries under the EU Common Fisheries Policy (CFP) in general and in relation to North Sea cod in particular. As the data presented in this paper will demonstrate, the issue is not in any important sense a problem of unresponsive bureaucrats or a lack of political will. It is a problem of institutional coordination; it is about the possibilities and constraints in how institutions make and communicate decisions. In our close observation of examples of these processes we actually found a good deal of **accountability** traceable to the concerns of the fishing industry, as well as extensive and honest attempts by many fisheries scientists to be **transparent** about how scientific decisions are arrived at. Yet this accountability and transparency has in no way led to a knowledge base for fisheries management perceived by stakeholders as useful and legitimate. Indeed, the scientific