

Towards a Shark and Ray Management Plan for the North Sea : the role of stakeholder participation

Paddy Walker (1), Irene Kingma (2) and Monique van de Water (3)

(1) VHL University of Applied Sciences, Leeuwarden, The Netherlands. (2), (3) Dutch Elasmobranch Society, Amsterdam, The Netherlands. Presenter contact details: e-mail: paddy.walker@wur.nl; phone: + 31 (0)58 284 6267; mobile: + 31 (0)6 222 78 193.

Summary

There are 18 species of sharks and rays in the North Sea populating all ecological niches from coastal to offshore, pelagic and demersal. These species are characterised by their late maturity and low fecundity, making them extra sensitive to enhanced mortality by fishing and loss of coastal and offshore habitats for nursery and feeding. Many of the species are included in international policy and conservation guidelines as threatened or some, for example the common skate, are locally extinct in the North Sea. For the implementation of the Marine Strategy Framework Directive the Dutch government requires advice on measures for sharks and rays. An advisory management plan for these species has been written over a period of 18 months during a participative process in which scientists, NGOs, fishermen, fisheries representatives and government officials were invited to share their expertise to help formulate management objectives and measures. The Dutch Agricultural Institute (LEI) carried out a cost-effectiveness study for the measures. This presentation examines the interactive process used to formulate management objectives and measures for sharks and rays in the Dutch part of the North Sea and explores the different styles of participation of stakeholders in this process.

Introduction

Since 2012 the Dutch government has given priority to the position of sharks and rays in all aspects of national and international policy. For the implementation of the Marine Strategy Framework Directive (MSFD) a management plan is required, in which the measures to be taken to achieve the policy objectives for these species are formulated according to Descriptor 1 of the MSFD – biological diversity is maintained as described in EU-COM (2008). The Dutch Elasmobranch Society and VHL University of Applied Sciences were commissioned by the Dutch government to write a management plan for sharks and rays. Although the plan is intended for the Dutch part of the North Sea, international cooperation is essential. One of the prerequisites of the implementation of the MSFD is that stakeholder participation be assured. This project, therefore, had two main objectives: (1) to prepare an advisory document for the Dutch government on objectives and measures for sharks and rays to improve species abundance, distribution and condition; and (2) to ensure that the measures could rely on a broad acceptance amongst the relevant stakeholders. The second objective was addressed through a participative process involving scientists, NGOs, fishermen, fisheries representatives and government officials. The project was divided into three phases: (1) selection of indicator species; (2) current status of species and documentation of threats and pressures and overview of possible measures; and (3) analysis of cost-effectiveness and choice of a suite of measures.

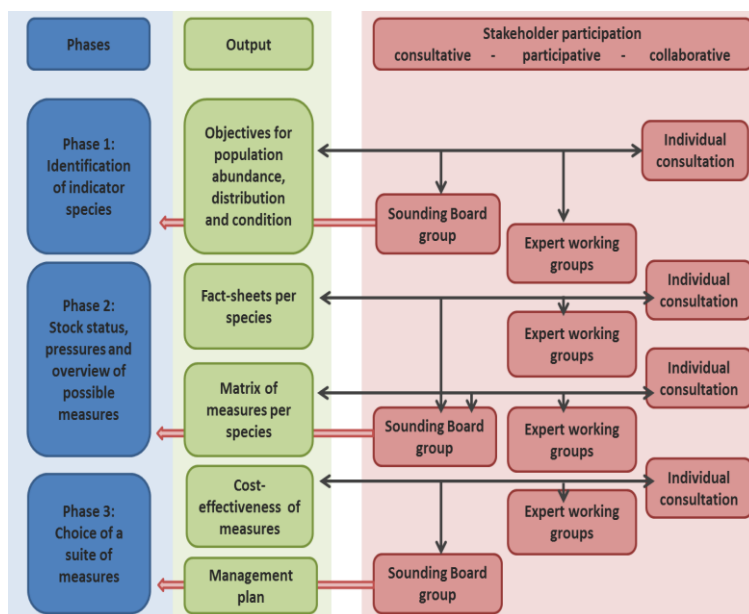
Materials and Methods

Before the start of the project an analysis was made of the best way to approach the participative process using the methodology of Pröpper (2009). Two different types of participative groups were identified as being the most effective way of ensuring participation of stakeholders : (1) a Sounding Board group which would meet near the end of each phase and in which decisions would be made about the reports produced in each phase; and (2) dedicated expert working groups on specific subjects, such as fisheries or species life-history strategies, to enable stakeholders to bring their expertise to the table. Identification of stakeholders and formulation of the criteria for the compilation

and working operative of the stakeholder Sounding Board group were identified beforehand by Van der Craats and van Rijn (2013). The scientific information was gathered through literature study, for example ICES (2012 and 2013) and consultation with experts. Policy objectives were defined, based on literature and expert judgement, which were agreed on by government. A fact sheet was made per species with information on life-history and with an overview of the potential pressures affecting the achievement of the policy objectives, for example fisheries, habitat change and currently valid policy agreements. The Agricultural Economic Institute from Wageningen University carried out an analysis of cost-effectiveness of measures. A final suite of measures is discussed and agreed upon with the Sounding Board group.

Results and Discussion

Different participative styles were effective at different stages of the interactive and participative process. Collaboration with individuals was important for specific knowledge and to discuss potentially difficult measures. Participation in working groups lead to constructive dialogue and was beneficial to creating awareness and ensuring that the stakeholders were 'on the same page'. Consultation in the Sounding Board group was important to reflect on the products of each of the three phases and allowed for input to the final product. See Figure 1. below for a scheme of the process.



The project had two main objectives: (1) to prepare an advisory document for the Dutch government; and (2) to ensure that the measures could rely on a broad acceptance amongst the relevant stakeholders. The first objective has been met with the reports and final advice to be given to government. The process had a high level of stakeholder participation, ranging from consultative through participatory to collaborative whereby stakeholders were able to include their particular expertise and issues, to voice their concerns and to influence the outcome of the project.

Figure 1. Scheme of participative process leading to a shark management plan.

As stakeholder commitment is essential for the ecosystem-based approach to management as described in the MSFD, we still intend to evaluate what the level of acceptance is of the end users of the advice – fishermen and managers.

References

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