

“FRAP”

Reconciling fishermen and fish-eating vertebrates

Conflicts arising from the competition between humans and wildlife for biological resources are as old as mankind. For thousands of years the responses of humans were to protect their resources and to defeat competitors. With an increasing awareness of the values of biodiversity, attitudes of the civil society have changed towards the conservation of wildlife and the protection of decreasing resources. However, public policy aiming at reviving the populations of threatened species has sometimes turned out to be so successful that the increased populations are causing damage to human activities such as agriculture, forestry and fisheries.

The need to reconcile such conflicts is the logical response to this change in human-wildlife relationships.

Reconciliation means managing the competition between people and wildlife that has risen from these changing attitudes. Attempts to reconcile conflicts are usually developed on a case-by-case approach. As a consequence reconciliation activities differ greatly among conflicts and countries. Nevertheless, there are many common elements to human-wildlife conflicts around the world. A generic framework can offer help in the reconciliation of conflicts between humans over wildlife and biological resources by building on such common elements and the experience gathered in different conflict reconciliation approaches.

The FRAP project’s main objective was to **develop such a generic Framework for biodiversity Reconciliation Action Plans for conflicts between the conservation of large vertebrates and the use of biological resources by humans**. Its specific objectives were:

- to assess the conflicts between the conservation of fish-eating vertebrates and fisheries from an ecological and socio-economic perspective;
- to evaluate and develop successful mitigation strategies and a mix of policy instruments;
- to design participatory decision strategies and to

develop recommendations for effective stakeholder interactions;

- to integrate the results into a generic framework for reconciliation action plans; and
- to disseminate the results to stakeholders and the public.

The generic framework was illustrated using conflicts between the conservation of **grey seals, otters and cormorants** versus fisheries as models. To develop a framework that is consistent across national boundaries, regional comparisons were made between Denmark and Italy for cormorants, Central Europe (Germany, Czech Republic, partly Austria) and Portugal for otters, and between Finland and Sweden for grey seals.

Three essential phases were identified in the development of reconciliation action plans:

Phase 1, screening the conflict, aimed to raise awareness of different aspects to consider in the development of a reconciliation action plan by a preliminary evaluation of the history, intensity, and dimension of the conflict.

Phase 2, assessing and analysing the conflict, had the purpose to improve the factual knowledge and understanding of the conflict. This understanding was essential



Project acronym:

FRAP

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Development of a procedural framework for action plans to reconcile conflicts between the conservation of large vertebrates and the use of biological resources: fisheries and fish-eating vertebrates as a model case.

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**“THE FRAP RESULTS SHOW
HOW IMPORTANT THE
CONTINUOUS INTERACTION
BETWEEN ECOLOGICAL AND
SOCIAL SCIENTISTS IS FOR
DEVELOPING CONSISTENT
BIODIVERSITY RECONCILIATION
STRATEGIES”**

to identify opportunities and limitations for conflict reconciliation. Important landscape factors determining the abundance of species and their visiting rates to the resource were identified, and the quantities of commercially important fish in the diet were evaluated. The socio-economic and legal research produced country reports on the legal and institutional framework, regional socio-economic reports, a social impact assessment, and a discourse analysis that was based on interviews with relevant stakeholder groups.

During the **third phase, deriving and implementing resolutions**, ecological mitigation techniques – including information on their cost-effectiveness – were evaluated, and a generic modelling framework (stochastic age-structured matrix model) was built that is applicable to a wide range of species and situations. This led to the development of the so-called **FRAP-calculator** as a “product” and tool for decision-support in population regulation management. On the social sciences side, in each model region a report on “Policies – practice and potential” provided a detailed evaluation of policy instruments and suggestions for improvement. Based on the participatory workshops in the various countries, recommendations for effective stakeholder interaction were

developed and participatory decision strategies involving relevant stakeholders from the local up to the European level were designed.

The FRAP results show how important the continuous interaction between ecological and social scientists is for developing consistent biodiversity reconciliation strategies. In addition, the presentation of project results and the intense exchange on comparable conflicts from all over the world at the FRAP final conference proved the importance of integrative approaches involving relevant stakeholders in the development of successful strategies in biodiversity conflict management.

Regarding EU policies, these results contribute to the EU Biodiversity Action Plan for the Conservation of Natural Resources (2001), Objective 2.3 “To develop management plans for selected threatened species”, as well as to the implementation of EU Communication (2006) “Halting the loss of biodiversity by 2010” by addressing three relevant policy fields: safeguarding most important habitats and species, agricultural and rural development policies as well as fisheries policies.