AQUACROSS Résumé de rapport
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Periodic Reporting for period 2 - AQUACROSS (Knowledge, Assessment, and Management for AQUAtic Biodiversity and Ecosystem Services aCROSS EU policies (AQUACROSS))

Reporting period: 2016-12-01 à 2017-11-30

Summary of the context and overall objectives of the project

Aquatic ecosystems are home to an array of different species and habitats, and provide numerous benefits called ‘ecosystem services’ to society. These ecosystems are under significant threat by human activity. If the degradation of aquatic ecosystems is not soon reversed, the effects will affect their capacity to provide ecosystem services and ultimately human well-being. In response, the EU 2020 Biodiversity Strategy has been put in place to tackle the loss of species and habitats and establish targets to protect and preserve biodiversity.

In an effort to halt biodiversity loss across freshwater, coastal and marine ecosystems, the project AQUACROSS has the following four goals:

1. To support the implementation of the EU 2020 Biodiversity Strategy for an improved functioning of aquatic ecosystems as a whole;
2. To explore, advance and support the implementation of the ecosystem based-management concept, which is understood as management or policy options intended to restore, enhance and/or protect the ability of an ecosystem to remain in good health;
3. To specifically identify and test management and business models and tools to identify the benefits of aquatic ecosystems for stakeholders, businesses, and policy-makers; and,
4. To mobilise policy-makers, businesses, and societal actors at global, EU, Member State, and case-study levels.

Work performed from the beginning of the project to the end of the period covered by the report and main results achieved so far

From EU level to the national and local scale, the AQUACROSS project has analysed key environmental policies that potentially increase or lessen aquatic biodiversity loss. The work revealed synergies, conflicts and gaps in the implementation of policies - both at EU and AQUACROSS case study level -, and is making recommendations on how better integration could more effectively and efficiently protect aquatic ecosystems and biodiversity. This work also looks into how key data and information about these environments are gathered and potentially better used to inform policy-making.

The AQUACROSS Innovative Concept and Assessment Framework were developed in the first period of the project, with the aim of linking the complex interactions between natural and human systems in aquatic environments. This work breaks down relevant concepts to broad audiences from diverse disciplines and pushes the boundaries of existing knowledge. This laid the foundation for guidance on practically applying this framework, which is now being tested in the case studies. AQUACROSS continues to develop and test tools and approaches to link scientific disciplines, such as socio-economics, ecology
Informations connexes

and stakeholder knowledge. Detailed guidance has been developed to identify relevant threats to aquatic biodiversity, to assess links between biodiversity and ecosystem services at different scales, and advance ecosystem-based management responses. AQUACROSS delivers techniques and indicators that will allow the practical integration of the ecosystem services concept into decision-making.

Eight case studies are implementing the AQUACROSS approach throughout Europe. The work in the case studies is embedded in all parts of the project to ensure information exchange, integration across ecosystems, as well as interaction between disciplines. As well as testing the AQUACROSS research in real-world conditions, the case studies are a major source of information and data and will allow the co-creation of concepts and products with policy and business stakeholders. Overall, the project’s research is impacting the scientific community, as well as policy and business communities. The project aims to continue its integrative work across aquatic realms and governance levels. Case study work provides the opportunity to engage directly with practitioners and stakeholders—where much of the expected local impact will take place. Simultaneously, engagement in EU forums and policy processes will ensure the continued impact on a broader scale.

Progress beyond the state of the art and expected potential impact (including the socio-economic impact and the wider societal implications of the project so far)

AQUACROSS highlights the need to bring management of aquatic ecosystems together, bridging freshwater, coastal and marine environments in an integrated way. To do this, the project focuses on the concept of ecosystem-based management and connecting science, policy, and business, as well as local stakeholders to achieve its goals and create lasting impact for the EU.

The project’s integrative research approach continues to go beyond current science by looking into how existing national and local policies and financing instruments help or hinder aquatic biodiversity conservation. The project is raising awareness of how policy, from international to local scale, can affect aquatic biodiversity. AQUACROSS is also translating theory into practice, offering practical guidance on how to apply interdisciplinary ecosystem-based management science to protect biodiversity and optimise policies at the European and local levels.

AQUACROSS research supports better local governance of aquatic ecosystems. Through enhanced protection and improved management practices in local areas, managers can maintain or even increase human health and well-being. The integrative AQUACROSS approach allows the co-development of project outputs through participatory processes with stakeholders at the local level, enabling a sustainable shift in governance, as well as stimulating innovation and business solutions.

Knowing the importance biodiversity plays in providing valuable goods and services to society, AQUACROSS-generated knowledge can support innovation and cooperation with businesses. AQUACROSS research identifies proven business practices and new opportunities to link business solutions with environmental objectives.