



## Recommendations for water management authorities within Europe and beyond

### Key messages

- Adaptation is not sufficiently taken into account in river basin management planning and requires increased inclusion of a variety of stakeholders that are currently poorly integrated in planning routines.
- A prerequisite for successful adaptation action is an increased coordination on the vertical level between authorities and stakeholders as well as on the horizontal level in different policy and economic sectors.
- As participatory adaptation planning requires different know-how from water management authorities and stakeholders, capacity building was a crucial first step in the BeWater process and facilitated for the uptake of such approaches.
- Participation of actors from different sectors or management levels requires advanced communication and increased transparency. The inclusion of stakeholders is a resource intensive process whose benefit is the enhanced quality, acceptance and ownership of the developed results.
- The BeWater project contributed to increasing stakeholder ownership and capacity that led to increased water-relevant actions being implemented as a result of stakeholder cooperation as well as to the leveraging of new funding sources.

# Introduction

Climate change and other human pressures affect the abundance and quality of water resources and change current dynamics of the local water cycle and its ecological functionality, thereby impacting its availability for human consumption. Adaptation to these impacts is an essential task for water managers. A review undertaken by the BeWater project revealed, however, that only a few examples exist that implement adaptation efforts on the river basin level (Davis et al. 2014).

To react appropriately to the challenges posed by climate change, adaptation needs to be mainstreamed in water management and implemented on a river basin level. With regards to the efforts in the context of the European legal framework, such as the Water Framework Directive and the Flood Risk Management Directive, adaptation to the impacts of climate change is taken into account but not yet systematically mainstreamed in the development of measures to achieve the goals of the Directives within the current planning instruments. Such mainstreaming efforts are also clearly necessary and relevant for water management activities beyond Europe's borders.

## 1 The BeWater project

The BeWater project, supported by the European Commission's 7th Framework Programme, responds to the currently lacking integration of climate change in river basin management activities, with a particular emphasis on providing tools for innovative citizen participation. The novel approach developed in the project moves away from the traditionally expert and model-dominated approaches to adaptation planning and instead integrates stakeholders and experts in the process to facilitate the co-development of river basin adaptation plans in four Mediterranean case study river basins.

Noting the complexity of such an endeavour, the project elaborated a robust analytical approach of appropriate methods to ensure strong public participation and community engagement. As such, the project utilised interactive workshops, interviews, validation and evaluation processes and awareness raising events to identify local river basin needs, establish the scientific and political context, and develop and evaluate relevant and feasible actions for water management in each river basin.

The BeWater process has proven to be able to deliver results with a high degree of social acceptance, political relevance and technical interest to tackle the uncertainties and complex nature of climate change in the targeted basins. However, several challenges were encountered and remedied throughout the project that can offer valuable learning points for the implementation of participatory processes in other contexts. These barriers and recommendations on how they can be overcome, as well as how participatory river basin adaptation planning can be supported are outlined in the subsequent sections.

## 2 Barriers encountered and recommended actions

While river basins and their overarching administrations are unique in many regards, several commonalities can nevertheless be observed. Here, prevalent challenges to the successful design and implementation of river basin adaptation plans and the management options contained therein are presented, laying particular emphasis on participation-related considerations. On the basis of the four case studies of the BeWater project, the potential difficulties are classified according to their nature, namely (1) process related challenges based on structural and operational issues, (2) context related challenges based on culture, and behaviour, and (3) capacity related challenges based on institutional, technical and financial deficiencies. For each type of barrier, recommendations are provided for how these can potentially be overcome.

## Process related challenges and recommendations

In the organization of participatory processes, it is often challenging to identify and engage all relevant parties and individuals in order to achieve a balanced representation of the local society. Thus, it is important to a) adopt sound methods to identify and relate to local actors, b) ensure suitable conditions for individual stakeholders or stakeholder groups to participate (e.g. consider religious holidays, choice of location), c) ensure the process is clear, transparent and validated by all, d) be diligent with reporting and making available all relevant information, e) maintain the flexibility to integrate new actors when required by the process.

The limited vertical coordination between public authorities (e.g. between municipalities and the regional/national government) as well as horizontal coordination (within and between departments is a central impediment to effective adaptation). Current institutional structures restrict collaboration on the design, implementation and monitoring of adaptation measures as responsibilities are often limited to a single authority, despite most water-related challenges being of a multi-sectoral nature. Given that a clear institutional framework is generally lacking for promoting and managing participation processes, stakeholder inputs are not sufficiently legitimised and are therefore often not taken into account in decision-making processes.

Stronger political commitment is needed to mainstream participatory governance practices for adaptation. It is thus crucial to a) foster stakeholder participation and the integration of actors from several sectors into the design, implementation and evaluation of policies, b) strengthen the use of specific protocols (such as the methodology developed in BeWater) to guarantee the quality and efficiency of these processes and c) communicate to the public and public institutions the need for stakeholder participation in decision-making processes in order to increase awareness.

Given these considerations, it is recommended to form participatory institutions or platforms to improve collaboration between all public entities relevant for adaptive water governance and to improve and support the participation of citizens in decision-making and implementation processes. In parallel, the capacity of local and national actors to better collectively manage natural resources should be strengthened by applying a multi-disciplinary and inter-sectoral approach. The different policies in place and actions towards their implementation should be mainstreamed towards the objective of increasing resilience of local socio-economies.

## Contextual challenges and recommendations

Given the diversity of actors, interests and objectives involved in designing river basin adaptation plans, collaborative and inclusive processes can often prove challenging in terms of reaching common agreements and acceptance of the proposed actions. Communication barriers are common due to differing stakeholder backgrounds, levels of knowledge and areas of expertise as well as varying priorities. It is thus crucial to invest sufficient time and resources in participatory processes to establish a shared view of the main problems and issues being faced in the basin, as well as to design concrete and integrated management solutions. Technical jargon should be avoided or, if utilized, first be introduced in a way all participants may rely on a common understanding.

In most authorities, a top-down, technocratic approach is dominant in planning. Positive experiences in the BeWater and other projects and initiatives highlight that integrating stakeholder involvement in the decision-making process is a valuable addition to the purely science-based culture. Furthermore, participatory approaches contribute to overcoming exclusive power relationships and developing more balanced decision-making processes. For example, the practice of direct communications between stakeholders and administrations should be strongly avoided. In this way, public participation contributes to improved transparency and democratic quality.

Furthermore, lacking personal interest, political will or confidence in the outcomes of such processes is frequent. Cultural considerations such as not being accustomed to expressing needs or mistrusting certain stakeholders as a result of negative previous experiences should be taken into account. Here, it is recommended to clarify expectations at the start of the process and try to present realistic ambitions for what can be achieved within the given conditions. To ensure that key individuals commit to the development process and will later pursue the political uptake of the plan and its funding, as well as to foster the continuation of the collaboration of all involved actors, it may be useful to establish a steering committee or a coordinating entity.

## Capacity challenges and recommendations

Capacity challenges refer to those of an institutional, technical or financial nature. The limited timeframe available to conduct participatory activities and the lack of permanent local offices where people can find necessary documentation and information needed for participatory processes are examples of institutional challenges. It is important in such cases to a) ensure that institutional structures include participatory processes in their regular routines, b) make use of upcoming citizen initiatives which are policy relevant and can serve to address specific issues, and c) strengthen the capacities of civil servants as well as citizens for handling participatory processes. Furthermore, given that the mainstreaming of adaptation to climate change in the river basin is a dynamic process, it is recommended to develop a mechanism to enable regular reviews and updates of the river basin adaptation plan and the measures contained therein.

Technical capacity challenges are often knowledge-based, referring for example to the high degree of complexity of the issues being dealt with and the often absent or limited research data projecting climate change and its potential impacts. It is thus crucial to adopt a multidisciplinary approach, ensure sufficient time to gather available relevant information, and structure it in a way which is most useful for the process, as well as to engage a sufficiently diverse group of actors to ensure all relevant perspectives and areas of expertise are able to understand the interrelations and provide input.

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Davis, M; Rouillard, J; Lukat, E; Stein, U; Tröltzsch, J; Vidaurre, R. (2014). Compilation of best practice examples and experiences of adaptation plans. Deliverable D4.1, BeWater, FP7 project no. 612385 -SIS.2013.1.2-1 European Commission, 67 pp.

