

Adapt to drought and  
water scarcity now



BENEFIT OF GOVERNANCE  
IN DROUGHT ADAPTATION



## Policy brief “Benefit of Governance in Drought Adaptation (DROPP)”

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# Policy brief “Benefit of Governance in Drought Adaptation (DROP)”

## *Introduction*

This policy brief presents work of the team of scientists that have been working in the project “Benefit of Governance in Drought Aadaptation” (in short: the DROP project), which is included in the INTERREG IVB NWE programme of the European Union. People in Northwest Europe generally consider drought not as a problem but as a blessing. For nature, however, it often is a problem. Additionally, periods of drought caused by climate change are also impacting agriculture and fresh water supply. In the DROP project water authorities in six regions and research institutes from five countries (FR, DE, NL, BE, UK) are collaborating to take measures aimed at greater drought and water scarcity resilience and study the implementation processes of these measures. The Dutch water authority of Vechtstromen is the overall lead partner, while the University of Twente leads the research team (the ‘Governance Assessment Team’).

As a result of climate change, it is expected that extreme events influencing water management (flooding or drought) will increase. Early adaptation to this trend is therefore required. Governance plays a crucial role in the adaptation process, particularly in restricting or facilitating the implementation of adaptation measures. In-depth knowledge about the governance setting of a given region and its type of measures is therefore essential in realizing effective adaptation.

## *Governance Assessment Tool*

Much attention in our project is focused on governance issues. But what does ‘governance’ actually mean? The concept of ‘governance’ is widely used both in practice and in policy science literature, but with a great variety of meanings. In the DROP project, we have a clear idea about what makes up a governance context and what makes it supportive or restrictive for the realization of measures.

In its simplest form governance is about five aspects: where, who, what, how, and with what? Where: on which scales and administrative levels? Who: with what stakeholders and networks? What: with what variety of problem perceptions and goal ambitions? How: with what broad strategies and concrete measures? And with what resources: what money, knowledge, legal authorities etcetera are needed? For all of these aspects the following criteria apply: are they complete, are they coherent, do they leave sufficient flexibility and do they actually apply pressure in support of the measures? We have elaborated that idea in a user guide to help assess governance conditions. This guide includes a scheme with key questions of no more than one page. This then is the core of our ‘Governance Assessment Tool’.

The “Governance Assessment Tool” is used to diagnose the regional settings and to formulate regional roadmaps with recommendations for optimizing regional settings. The tool does not select what measures are more or less apt for attaining drought resilience. Rather it analyses the governance conditions that can stimulate or hinder the realization of such policies and projects. In the format of this “policy brief” document we cannot present our analyses and all 40 recommendations to

the regional water authorities that stem from these. Rather we will present some of our more general findings.

### *Variety requires tailored action*

Each of our six regional reports contains some specific backgrounds, analyses of the governance conditions and some recommendations on how to deal, from a drought perspective, with the water governance context in the region. The recommendations are partially based on comparing the specific region's context with the Governance Assessment Team members' knowledge of other water management systems, including a comparative analysis with the other five regions studied in DROP. The team's knowledge of the governance context is based on two rounds of field visits and associated interviews with representatives of a variety of stakeholders and including archival research.

In the six regions studied there is a big variety of drought measures implemented – involving inter alia drought prediction models, building of infrastructure for improved water level management, natural water retention measures, and farmer-targeted assistance to improve irrigation practices. This variety reflects that the natural situation in the various regions of northwest Europe is so varied that there is a need for tailored action. While everywhere there is a need for increased insight and data processing to better understand the dynamics of the water system regarding drought issues, the best measures are highly dependent on the geo-hydrological situation and structure of the water demand. However, as we have learned from the comparison of the Flanders and the Dutch cases, also the governance context has a clear influence on the development of habitual approaches in policy-making and implementation. Some of the variety is not so much the result of physical conditions, but more so of governance settings.

### *The need for an increased integration of flood and drought management*

In our project the UK Somerset case is a clear example of a situation in which the urgency of the big 2013-2014 flood (after several years of droughts) disturbed the balance between drought and flood measures while both are sides of the same climate change adaptation coin. But also in all other cases the necessity of considering surplus water events when taking drought resilience measures (and the other way around) is essential. Recognizing the need to address the impact of floods, while still acknowledging that there is also a very real threat for water scarcity in the Northwest European region, changes the range of strategies and instruments that could be used to effectively mitigate variability and extremes. This more joined-up approach of different forms of water management that is needed draws together a range of lessons for more effective governance of climate change adaptation across the whole of Northwest Europe. We need strategic governance approaches focused on adaptation and resilience of the whole water system rather than crisis management of extreme events.

### *Continuous attention for awareness raising needed*

All across the areas studied we found that the problem awareness among land owners and the general public, and thus many politicians, is still low. This restricts the selection of forceful interventions to increase drought resilience and makes it sometimes more difficult to realize the measures chosen in practice. Based on the visits of the governance team, the discussions with the water authorities

and many other stakeholders, and the results of the governance assessment itself, it was possible to reach some major recommendations regarding this central issue of awareness and strengthening the position of drought and water scarcity issues on the public and political agendas in the various countries. We distinguished three major strategies for pushing the position of the drought issue that is still experienced by many as a second-order issue.

(1) Aiming to place drought and water scarcity on the public and political agenda on its own, as an independent problem; For instance, by providing continuous information to the public like in Flanders on the agency's website, or by directly addressing national water planners with a broad coalition of stakeholders like in the Netherlands' Delta programme process.

(2) Addressing drought by "piggy-backing" other issues, i.e. including drought-relevant measures in different planning initiatives and ensuring coherence of plans with drought objectives.

(3) Using a "plans in drawer" strategy by preparing a ready-to-implement strategy for when a drought event makes the topic climb the agenda and receive political attention responding a call for action.

The careful application of a combination of these strategies leads to the best way to position drought issues and bring them more alongside the already recognized importance of dealing with flood risks.

### *Preparation and implementation of water demand management*

Most measures taken are involving the distribution of available water and decreasing the water scarcity during dry periods by making the areas more resilient by improving their water buffering capacity. Water demand oriented measures are until now less taken. However in the future they might need to become more often part of the drought resilience strategy, even in a number of areas in water rich Northwest Europe. This should imply for now already the collecting of data on water rights, the development of uses, and reviewing water prices. Measures and policy instruments should generate incentives for use reduction, which are now often absent as water is still regarded as a free commodity rather than as a scarce resource. Thus fostering the mainstreaming of drought risk and drought preparedness into private actors' activities is important.

The collaboration with farmers proved to be very important in most cases in the DROP project, not only in the two where the pilot project was explicitly addressing agriculture. Increasing the synergies with agriculture, e.g. through farmer advisory services or the inclusion of farmers unions in the design and implementation of measures, seems to be a prerogative for successful demand management.

The management of expectations might be equally important. As long as the abundance of water in North West Europe is taken for granted by water users, the implicit responsibility to protect the water supply is placed by the users on the water authorities. Even though water supply should remain a public task, this does not imply that any new economic activity requiring extra fresh water, or water of a specific quality, or increased vulnerability for shortages, should be accommodated by the water authorities and tax-payers money. Some investments might not be wise in drought prone areas. Openly discussing the limits of public responsibility might increase the awareness and own preparatory measures of such water users.

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More information on the DROP project and additional reports:

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## Investing in Opportunities



This project has received  
European Regional  
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