OUTPUT 4 – Assessing the impact of Ecosystem-based Adaptation measures



Assessing the impact of Ecosystem-based Adaptation measures

Ecosystem-based Adaptation (EbA), a Nature-based approach to climate change adaptation, harnesses ecosystem services to increase resilience and reduce the vulnerability of human communities and natural systems to the effects of climate change. These EbA measures can be integrated into adapted agriculture, forestry and environmental management.

When implemented in the right context and location (cf. Output 3 of PROWATER), EbA is considered an important approach to increase resilience against flooding and droughts, exacerbated by climate change and anthropogenic impact.

However, how do we know whether we restored sufficient natural diversity of ecosystems and created enough (semi-)natural opportunities for ecosystem service development that can compensate for climate change and anthropogenic impact? How can we assess whether the EbA measures will in fact deliver the ecosystem services we targetted?

An Ecosystem Service assessment tool, targeted especially at water resource related services

To provide guidance to such questions and the implementation of Ecosystem-based Adaptation (EbA) measures, we applied the water retention and infiltration model of the University of Antwerp to the 2 Seas region, including catchments in the Netherlands, England, Flanders and France.

The resulting PROWATER ecosystem service assessment tool can help model the impact on water resources as well as other co-benefits of 4 types of EbA measures in different types of catchments.

A cross-border cooperation

From November 2017 to March 2023, 10 partners from Flanders, the Netherlands and the United Kingdom work together on PROWATER. The project has a budget of more that 5.5 million euros. In each country, water production companies, governments and research institutes as well as land managers are involved in order to achieve a supported vision for Ecosystem-based Adaptation.

The project PROWATER receives 3.315.974 € through the Interreg 2 Seas fund, co-funded by the European Regional Development Fund (ERDF), to work on climate change adaptation and to increase resilience against droughts and extreme precipitation based on ecosystem services. Interreg 2 Seas is a European territorial cooperation programme for the United Kingdom, France, the Netherlands and Belgium (Flanders).

















