



# THE ADAPTATION TO CLIMATE CHANGE PROGRAMME IN HUNGARY

## EEA AND NORWAY GRANTS

European Economic Area (EEA) Grants and Norway Grants are financial mechanisms established by Iceland, Liechtenstein and Norway to reduce economic and social disparities within the EEA and to encourage bilateral cooperation and project partnerships with 15 EU countries, including Hungary. (For details see [www.eeagrants.org](http://www.eeagrants.org).)

Iceland, Liechtenstein and Norway signed a memorandum of understanding with Hungary on October 12, 2011, making available EUR 153 million. Hungary and the donor states jointly selected 12 programme areas to which the donor states are willing to contribute. Seven programme areas are supported by EEA Grants (including the Adaptation to Climate Change programme), and five programme areas are financed by Norway Grants.

## PROGRAMME AIMS

On June 6, 2013, the Financial Mechanism Office of the EEA Grants and the Regional Environmental Center for Central and Eastern Europe (REC) signed a programme implementation agreement for the Adaptation to Climate Change programme in Hungary. The fund operator for the programme is the REC, and the donor programme partner is the Norwegian Directorate for Civil Protection. Total funding for the programme, which runs until April 30, 2017, is EUR 7,010,000. The programme aims to enhance knowledge about, and promote a clear understanding of, climate change impacts and vulnerability in Hungary; encourage actions to improve climate resilience at local level; raise awareness of climate change impacts; and share examples of replicable projects that contribute to reducing the impacts of climate change.

The programme fosters cooperation between the donor states and Hungarian entities and contributes to strengthening bilateral relations, including in the field of adaptation to climate change.

## PROGRAMME COMPONENTS

The programme is divided into three main components, all of which focus on climate change adaptation:

- C1: The National Adaptation Geoinformation System (NAGiS), to contribute to policy making, strategy building and decision making at local level.
- C2: Local climate change adaptation capacity building, involving the organisation of trainings for local-level decision makers and stakeholders.
- C3: Pilot projects focusing on climate change adaptation measures at local and regional level, including the provision of replicable examples of how resilience can be enhanced.

The programme also fosters cooperation between the donor states and Hungarian entities and contributes to strengthening bilateral relations, including in the field of adaptation to climate change. Several bilateral cooperation activities have been implemented at project and programme level, which have led to long-term cooperation between stakeholders from the donor and beneficiary states.

## PROGRAMME PROGRESS

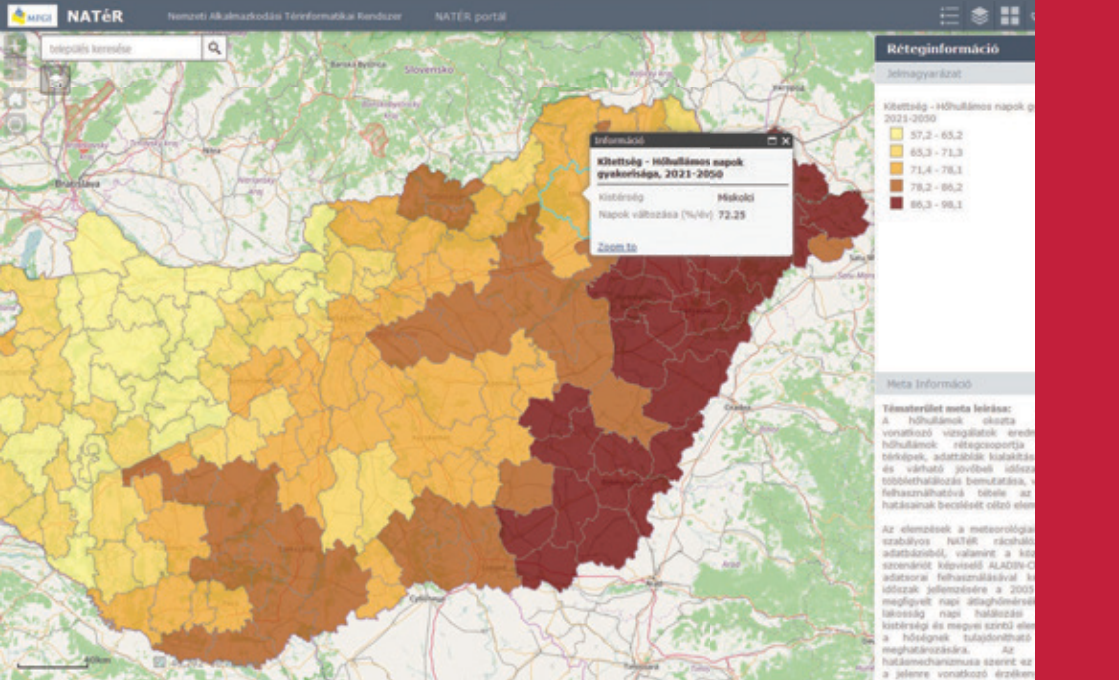
### Component 1

#### Activities

The IT infrastructure for the NAGiS was set up and a methodology was developed for the assessment of climate change impacts and sectoral vulnerabilities, including the establishment of a specific indicator system that will serve as a basis for the next generation of projects (i.e. the eventual setting up of a vulnerability assessment system).

#### Results

- A map-visualisation system with a resolution of 10 x 10 km, containing hundreds of layers that show how different climate change impacts can affect different areas of the country.
- A database (GeoDat) containing calculation results from modelling (exposure, sensitivity, expected impact, adaptive capacity and vulnerability).
- A meta-database facilitating navigation through different kinds of information (a "data-map" showing what to find and where).



The NAGIS can potentially provide information to help central, territorial and local administrations and municipalities in sectoral and territorial planning that takes into consideration the impacts of climate change and related risks.

More information is available from the following project websites:

- <http://nater.mfgi.hu/en>
- <http://nater.rkk.hu/english/>
- <http://agrater.hu/>
- [www.met.hu/KRITeR/en/kezdo/](http://www.met.hu/KRITeR/en/kezdo/)
- [www.met.hu/RCMeR/en/kezdo/](http://www.met.hu/RCMeR/en/kezdo/)

## Component 2

### Activities

The project team elaborated a methodology/roadmap based on international and national literature and best practice examples; developed capacity-building tools; and drew up a communication strategy aimed at raising climate awareness at local level.

## Results

Complex training programmes were developed on potential climate change impacts, vulnerability assessment and resilience building, and to share examples of local adaptation planning and practices. Capacity-building activities were organised for local authorities, decision makers and stakeholders on climate adaptation in Hungary.

For more information, see: [www.klimavalasz.hu/en/klimavalasz-project](http://www.klimavalasz.hu/en/klimavalasz-project)  
[http://klimatudatos.hu/?lang=en\\_us](http://klimatudatos.hu/?lang=en_us)

## Component 3

### Activities

Water-related adaptation is one of the most important areas of adaptation activities in Hungary. This component focused on the water retention potential of specific areas, along with measures to limit water run-off and water scarcity.

## Results

- Resilience in the Homokhat area was improved and water resources balanced more effectively by building a new 1.8 km canal to connect to an existing canal bringing water from the river Tisza; and by modernising the pumping station. This investment was an important step in the development of a complex water management system to ensure sufficient water for agricultural and household needs.

For more information, see:  
[www.morahalom.hu/eea\\_grants](http://www.morahalom.hu/eea_grants)

- A new methodology for precipitation management was elaborated in order to reduce municipal drainage system loads during extreme precipitation events in the settlements of Tat and Tokod, and to provide the basis for

planning appropriate drainage capacity, conducting an impact assessment for extreme precipitation, and formulating a priority list of investments.

For more information, see:  
<http://tat.hu/csapadekviz-gazdalkodasi-projekt/>

- Water balance in the river Oreg-Tur was improved by ensuring water supply to the dry riverbed in extreme weather periods. Sluices were reconstructed or built; dams and water level measuring stations were installed; and 1,100 m of the riverbed were dredged. This has improved irrigation by raising water levels in the upper stretches of the river, and has contributed to improving the area's ecological balance.

For more information, see:  
[www.oregturrehabilitacio.hu/index.php/en/](http://www.oregturrehabilitacio.hu/index.php/en/)

