



Local climate adaptation by NWRMs – The results of the LIFE-MICACC project



BASIC INFORMATION ABOUT THE LIFE-MICACC PROJECT

Duration: 01.09.2017. – 31.08.2021. (30.11.2021)

Partners:

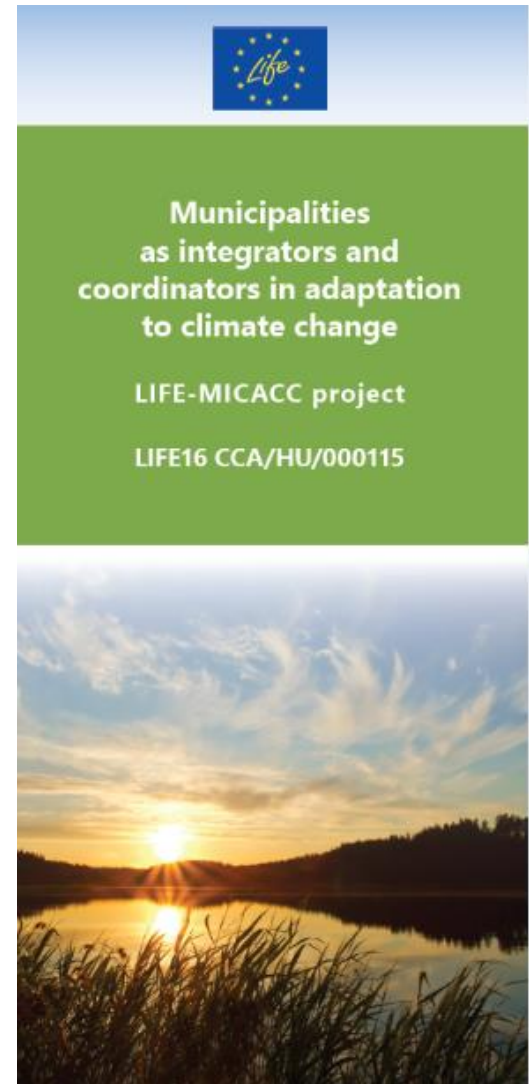
CB : Ministry of Interior of Hungary

ABs : Municipality of Bátya/Püspökszilágy/Rákócziújfalú/Ruzsa /Tiszatarján, Association of Climate-friendly Municipalities, General Directorate of Water Management, Pannon Pro Innovation Ltd., WWF Hungary + 24 cooperation partner municipalities

Overall goal: strengthen the adaptation skills of vulnerable municipalities

Target audience: decision-makers and experts of local governments

Budget: 2.564.783 Euro





MAIN FOCUSES OF THE PROJECT



MUNICIPALITIES

Climate change is a global challenge, however the most effective way is to act locally.

- ❑ Municipalities have first-hand experiences at the settlements → feel the consequences, see the damages of climate change
- ❑ They know the potential resources → involvement of unused areas, other local opportunities
- ❑ They know the local stakeholders → can involve and mobilize them
- ❑ They form local strategies and plans → have the potential power to integrate CCA approach into these documents

Municipalities are key actors in coordinating CCA locally.

NWRMs

Climate change happens more often and in a not predictable way. Balance water surplus and water scarcity.

Solutions that are:

- low cost, relatively cheap
- small-scale
- design and implement quickly
- close-to-nature (not concrete)
- reuse abandoned areas for water retention
- ecological aspects, biodiversity are taken into account
- win-win: good for flora&fauna, and for humans
- sustainable for the long run
- innovative

NWRMs must have a place besides the traditional water management (grey) solutions.

THE 5 PILOT SITES– 5 MODEL NWRMS



BÁTYA



- Annual precipitation is unevenly distributed
- Water surplus and water scarce periods
- Heavy rainfall, inland inundation, drought
- Old claypit → multi-basin lake with open water surface, wetland (1 ha)
- Retain of excess water, recharge of groundwater (heat wave, drought treatment)









RÁKÓCZIÚJFALU



Dual problem:

Driest region of the country (heat waves, increasing water demand) + frequent inland flooding (from snowmelt in spring)

Inland drainage channel (sluice gate) + retention of excess water in the neighbouring deeper area → mitigation of drought risk, rise of groundwater level





RUZSA



- More and more drier countryside
- The average rainfall is constantly decreasing, the groundwater level is falling
 - increased water leakage
 - poor water retention capacity

Inland: retaining decanted water from the local waterwork (10-20 m³/day) in a small pond

Outskirts: retaining treated effluent water from the sewage treatment plant (150-200 m³/day) in a pond









TISZATARJÁN



The settlement is located on the floodplain of the Tisza River.

Aim: to increase the local flood safety, to prevent the reproduction and proliferation of invasive species on the floodplain
+ increase retained water resources



The solution increases the flood-receiving capacity of the floodplain and supports the storage of water and the distribution of water in the landscape.





LIFE-MICACC project deliverables

10 study trips to the pilot sites

Project website

5 study trips for foreign municipalities at the pilot sites

E-learning material

5 press trips to the pilot sites

LIFE-MICACC mobile application

5 NWRM prototypes at 5 Hungarian municipalities

1 full and 5 short project movies

Recommendations to the Government

Hungarian guide for the global Water Risk Filter

Adaptation Guide

Runoff models for catchment sites

5 vulnerability assessments

Climate adaptation training material for municipalities

5 catchment level feasibility studies

6 x 4 climate adaptation trainings

5 replication plan for additional sites

4 climate conferences

5 study trips to abroad

3 networking events

15 Hungarian municipalities joining the Covenant of Mayors

13 roadshow events

THANK YOU FOR THE ATTENTION!



LIFE-MICACC project



**Zsuzsanna Hercig, Life project manager
Ministry of Interior of Hungary**

+36 30/566-8746

life@bm.gov.hu

<http://nwrn.bm.hu/>