Project progress (1)

WP T1 Investigative Danube

WP-Leader:

Czech Technical University in Prague

Faculty of Civil Engineering

is finalized

Programme co-funded by the
European Union (ERDF, IPA)

Knowledge base – main Output

- Summarization of:
  - GAP-analysis about current land use practices and their impacts on water management
  - SWOT-analysis (based on a questionnaire)
  - Policy review about existing policy instruments/ governance and their current practical implementation
  - Best Management Practices (BMP): review + recommendations

→ By means of stakeholder workshops, interviews, expert teams and literature/previous project studies

BMP catalogues

- BMP catalogues:
  - Agriculture – arable land
  - Agriculture – grassland
  - Forestry
  - Spatial planning

Agriculture – arable land

Agriculture - grassland

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Forestry

Spatial planning

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Uniform structure – to be more applicable and comparable

2.1 Conservation tillage

Type of practice/measure		
Technical	Management	Other - specify
	X	

Description of practice/measure

Conservation tillage is agricultural practice applied on arable land. Basic principle consists in replacement of conventional tillage based on regular plough (turning of top soil layer of ca 15 – 30 cm) by soil surface loosening by cultivator. Top soil layer of ca 5 - 10 cm is loosened by various technologies, but is not turned upside down.

Intended goals of practice/measure

The top soil layer is not turned, but only loosened. This provides good condition for germination of seeds and mechanically damages weeds.

Characteristics of practice/measure

The measure is suitable for any types of field, soil and crop.

Effectiveness in operation

Positive effects include mainly following: soil is only disturbed by cultivator, but nut turned by plough. It allows continuous activity to soil organisms, not interrupted by ploughing and following period. Soil structure is not that much affected by mechanical processing of soil. This technology allows to let mulch (crop residues) within topsoil, what provides good protection against soil erosion. Finally – the operation is less energy and time demanding than conventional tillage, based on ploughing.

On soil conservation	***
On flood control	**
On water quality conservation	*

Cost

The technology needs special machinery, which is not cheap, but on the other hand, it usually combines cultivator together with seeding machine. In such a case it needs only one field operation instead of 3 – 4 in case of conventional tillage based on plough. Operational costs therefore are lower, than in case of conventional tillage due to fuel and time savings. Economically, the technology is usually profitable for farmers, due to savings in time and energy. Yield increases for ca 5 % within several years after application due to increased soil quality and fertility.

Investment costs	**
Operational costs	*
Economic losses of farmer	Not relevant for this measure

Potential problems/conflicts	
Necessity of exchange of machinery from set of machines for conventional tillage to combined machine for conservation tillage. Can be reduced by purchasing simple cultivator and keeping conventional seeding machine.	
Rate	*

Required or supported by CAP?
Common agricultural policy should lead to comparable conditions for farmers, but also to comparable standards in soil conservation and water protection. On the other hand, CAP is implemented with high variability in different countries, due to different power of agricultural industries in negotiation conditions for every country. This type of measure is generally supported and is recognized as positive measure in terms of soil and water quality conservation.

Required or supported by national implementation of Common Agricultural Policy?

Country	AT	BG	HR	CZ	D	HU	RO	RS	SLO
yes/no	yes	yes	yes	yes	yes	yes	yes	no	yes

Applied in the country?

Country	AT	BG	HR	CZ	D	HU	RO	RS	SLO
Select level: *, **, ***	**	**	*	***	**	**	**	*	*

Photos – if relevant

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Knowledge base – Contributions to EUSDR

Contributions to the **EUSDR Priority area 4 and 5:**

- based on a process of know-how exchange, state-of-the-art techniques/methods, intensive stakeholder involvement
- valuable source of information on the environmental challenges in the Danube river basin from the point of view of the CAMARO-D project scope
- provides possible solutions and mitigation measures for a wide range of challenges (best land use practices from an interdisciplinary field of expertise on water management, flood control and spatial planning)

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Project progress (2)

WP T2 Explorative Danube

WP-Leader:

Agricultural Research and Education Center

Raumberg-Gumpenstein

BUNDESMINISTERIUM
FÜR NACHHALTIGKEIT
UND TOURISMUS

HBLFA RAUMBERG - GUMPENSTEIN
LANDWIRTSCHAFT

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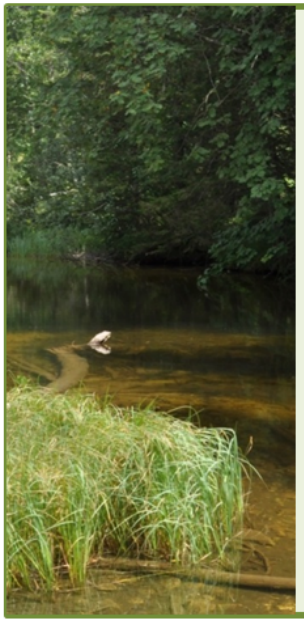
Preparation of pilot action clusters - finalized

Outlining comparability (concerning problematic land use, risks,…) and foreseen pilot actions (including stakeholder involvement and training)



Cluster 1: Groundwater resources

Lead: HGI_CGS (ERDF PP10) & UL (ERDF PP3)

Partners:

- ERDF LP: Groundwater field Steyr
- ERDF PP1: Upper Styrian Enns Valley
- ERDF PP02: Catchment areas of Vienna Water
- ERDF PP10, ERDF PP03: Kupa River catchment area
- ERDF PP03, PP04: Ljubljansko barje – Well field Brest, Iška River
- ERDF PP12: Drinking water reservoir Kinzig; Conventwald

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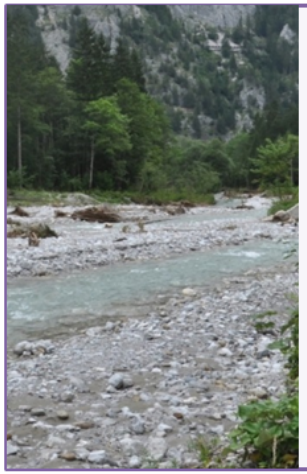
15th Steering Meeting, Pole 4

Budapest | April 18th 2018



Cluster 2: Torrents, small rivers and their catchments

Lead: EFA (ERDF PP9)

Partners:

- ERDF PP1: Upper Styrian Enns Valley
- ERDF PP3, PP4: Ljubljansko barje – Iška River
- ERDF PP6: Putna River basin
- ERDF PP9: Ochindolska reka

Cluster 3: Rivers and accumulation lakes

Lead: NMA_RO (ERDF PP7), EPAC (ERDF PP8)

Partners:

- ERDF LP: Catchment area Raab/Gnas
- ERDF PP1: Upper Styrian Enns Valley
- ERDF PP7, PP8: Black River – Hydrographic basin from Covasna County
- ERDF PP11: Reservoir Brno watershed / Svratka River basin
- IPA 1: Catchments of Gruža and Grosnica reservoir; Catchment of the Garaši and Bukulja reservoirs

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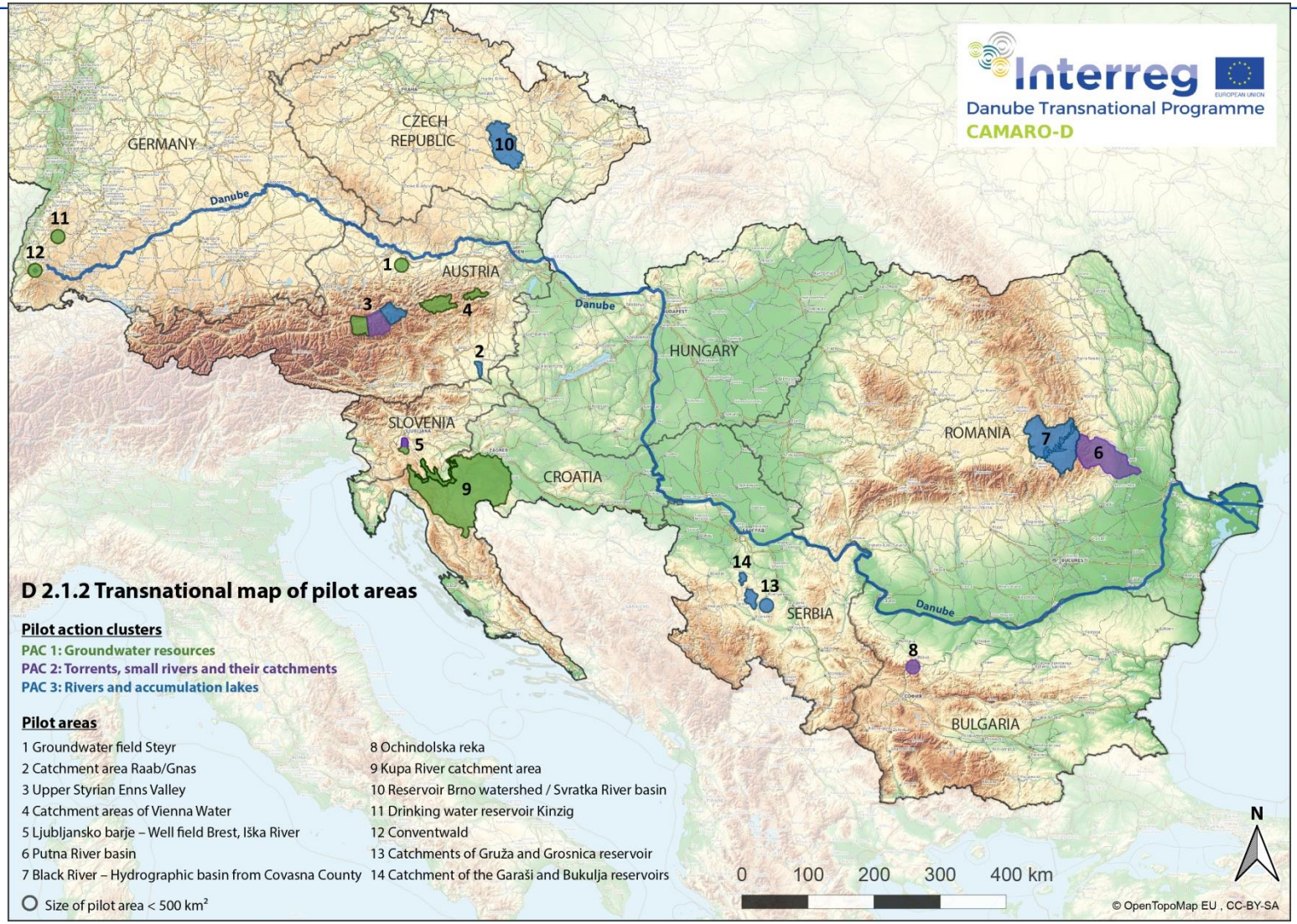

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