



INTERREG IV C-Project on Water Scarcity and Drought

WATER CoRe PROJECT INTERREG IVC

Imola Koszta

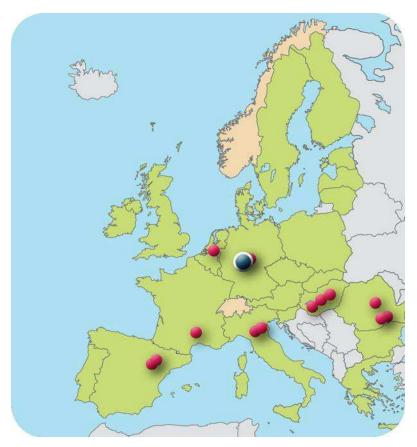
(Project partner: Regional Environmental Center for Central and Eastern Europe)

Workshop on Agriculture and Water Management in the Danube River Basin

Bucharest, 5-6 November 2012







Source: Public

7 EUROPEAN REGIONS

- •Hessen (Germany)
- Aragón (Spain)
- •Emilia-Romagna (Italy)
- •Hérault (France)
- North-Brabant (Netherlands)
- Lower-Tisza (Hungary)
- Covasna (Romania)

14 PARTNERS



































Political Platform









Organization: Thematic Working Groups

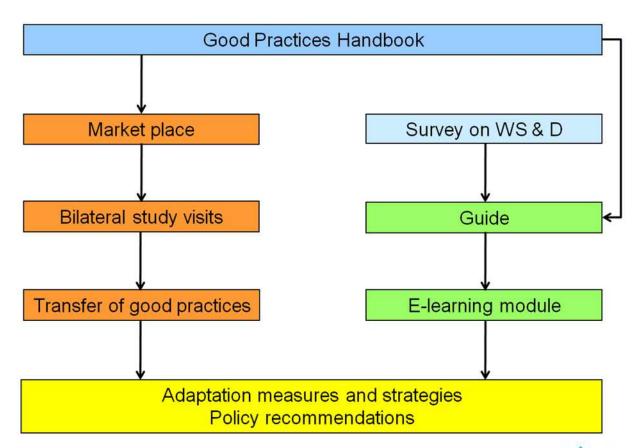
- Water Demand Side Management
 - Technical Measures
 - Economic Instruments
- Handling Drought Periods and mitigate Drought Effects
- Adaptation on Climate Change Effects on Water Management
- Strengthening Public Participation and Raising Awareness







Work flow, activities and outcomes of the project









Project result: Collection of Good Practices

		WG	A1 - W	ater demand-side management (technological measures)	
A1	1	HMUELV	LP	Groundwater Management Plan Hessian Reed	8
A1	2	HMUELV	LP	Guidelines for the Vogelsberg area	10
A1	3	HMUELV	LP	Measuring of the Water-Consumption in Agricultural Irrigation	12
Ī		WG A2 -	Water o	demand side management (economic and financial instruments	
A2	1	HMUELV	LP	Benchmarking of water supply and waste water companies in Hessen	63
				WG C – Climate change	
С	1	HMUELV	P1	Impacts of climate change and adaption strategies for the water resources management of the rivers Eder and Fulda (KLIMZUG)	108
С	2	HLUG	P2	Integrated Climate Protection Programme of Hessen (INKLIM 2012)	110
С	3	HLUG	P2	Adaptation Strategies for Climate Change and Extreme Weather Conditions and Measures for a Sustainable Groundwater Management (AnKliG)	112
С	4	HLUG	P2	Spatially distributed investigations on potential consequences of climate change for groundwater recharge in Hessen	115
С	5	HLUG	P2	Securing the agricultural production with additional water demand under altered climate conditions	117
С	6	HLUG	P2	Possible impacts of climate change on runoff characteristics of rivers in the Hessian part of the river Rhine catchment	119
c	7	HLUG	P2	Possible impacts of climate change on runoff characteristics of rivers in Hesse based on the ECHAM4/B2 projection	121
				WG D – Communication/Participation	
D	1	HMUELV	LP	Children's book on travelling water drops	165

Providing their good practices

103 in total

Establishing bi-lateral contacts and organising visits with Partner Regions to transfer good practices





Good Practices: Fact Sheets

WG	A1 - water demand side management (technological measures	Provincie Noord-Brabant
Partner	P13 - Provincie Noord-Brabant	ESCURIO DE CONTRA CONTR
Promoter	Provincie Noord-Brabant	
Project	34 - Agricultural groundwater management	
Туре	Technological	
Period	Permanent measure	
Location	Provincie Noord-Brabant	Marine Tal.
Target	Farmers	
Level	Regional	
Contact	René Klerks <u>Rkierks@brabant.nl</u> Frank van Lamoen <u>Fvlamoen@brabant.nl</u>	



To prevent a growing use of groundwater for sprinkler irrigation there has been a stop on new irrigation permits in North-Brabant. Also the relocation of waterputs is not allowed anymore. In the existing permits it is prohibited to irrigate grassland before the 1th of June and in June and July between 11.00 en 17.00 hours.

At the same time a project was started called 'Agrarisch grondwaterbeheer' (Agricultural groundwatermanagement). Since the year 2000 the 8.400 farmers that have a permit for using groundwater for sprinkler irrigation, have to registrate how much groundwater they extract. A total of 2.850 farmers have joined the project Agricultural groundwatermanagement. The participants are supported by measures such as:

- research into crop selection
- improving natural water supply by water conservation.
- information on effective, efficient and prudential watering (advice based on satelite images)

They use 40 percent less groundwater than those who do not participate.

From the revenues of the provincial grondwatercharge part of these measures are supported financialy.

Results obtained

Through the combination of regulation and stimulation the use of groundwater for sprinkler irrigation has stabilised. In North-Brabant, the average amount of groundwater used for sprinkler systems has declined (2000-2007).

Success factors

Financial stimulation: the participating farmers are exempted from paying the provincial groundwater charge. Participants benefit from the advises that can be directly used.

Indicators used

Decline in the use of groundwater for sprinkler irrigation.

Total costs

On the one hand farmers pay for the services they receive. On the other hand they are exempted from paying a groundwater charge.

Further references

www.zlto.nl



Title, type, period, location, target groups, level and contact



Project description, results obtained, success factors, indicators used, repeatability & applicability, total costs and further references.







A1: Water demand-side management (technological measures)

- Measuring of the Water-Consumption in Agricultural Irrigation (DE)
- IRRINET (IT)
- Novel Water reuse Technologies (IT)
- Research program on water saving in agriculture (IT)
- Agricultural groundwater management (NL)
- ADOR (Decision Support on Irrigation Organization) Irrigation Programme in High Aragon (ES)







A2: Water demand-side management (economic and financial instruments)

- WATMAN Project Optimization of water allocation in case of drought and water scarcity component (RO)
- Economic measures addressing water scarcity and drought in Romania
- Water as an economic driver (NL)
- The Water Farm (NL)







B: Drought management

- National Drought Monitoring Centre (ONS) (ES)
- Local Action Program to cope with drought and desertification (ES)
- Analysis of the water balance of the intensive cultivations in the mountainous basin of Senio Torrent (IT)
- Agromonitoring network integrated system for water resources management in Romania
- Restoration of brook systems (NL)







C: Adaptation to climate change

- Securing the agricultural production with additional water demand under altered climate conditions (DE)
- Impact of Climate Change for Food Production in Western Balkan region Project
- Impacts of Climate Change and Variability on European Agriculture: CLIVAGRI project
- Multifunctional Land Use (NL)
- Knowledge for Climate Dry Rural Areas (NL)







D: Communication and participation

- Permanent Exhibition on Irrigation Technologies (IT)
- Ecomuseum on water (IT)
- ACCRETe Project / Agriculture and Climate Changes: how to Reduce human Effects and Threats
- The Waterfootprint (NL)







Project result: e-learning module









WATER CoRe Website



WATER CoRe

WATER CoRe: Water scarcity and droughts; coordinated actions in European regions. WATER CoRe intends to provide an exchange platform for water scarcity and drought issues on regional and local level for all European regions.

Water Scarcity and Drought, increasingly caused by climate change effects, will affect the European Union on ecological, on economic as well as a on social issues. These impacts will affect the citizens of the European Union in particular on local and regional level. Strategies on regional policy level are required, in order to mitigate these climate change effects.







Survey on Water Scarcity and Droughts in 2/2/2012

WATER CoRe Survey on Water Scarcity and Droughts in Europe

Although the experience and good practices from the project partners covers a broad spectrum of water scarcity and drought issues, a huge amount of interesting projects, documents and examples to deal with the issue exists all over





News

Karlsruhe - Germany



WATER CoRe takes part at the Integrated Water Ressource Management (IWRM) Conference,

Management (IWRM) Conference Karlsruhe 2012 After the successful premiere of IWRM

Karlsruhe 2010, a second edition of IWRM Conference is held at the Karlsruhe Convention Centre during 21- 22 November 2012.

[more]

Aragon - Spain



September 27-28, 2012

Aragon experiences in drought management aroused the interest of a French delegation

The French delegation interests focused on the water management activities carried out by the Aragon Water Institute and the Aragon Regional Ministry for Agriculture, Livestock and Environment. These activities include a wide range of







Focal Point for Central and Eastern Europe











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Thank you for your attention!

More information:

www.watercore.eu

Contact:

barbara.ehrle-manthey@hmuelv.hessen.de jignjatovic@rec.org ikoszta@rec.org



