

Waterdrive Case Area in Poland

Kutno County: Multi-actor cooperation to increase water retention in the agricultural basin

STØTTET AF

Project Partners:

Promilleafgiftsfonden for landbrug

Associated Organisation:



Centrum Doradztwa Rolniczego
w Brwinowie



Organizacja Narodów
Zjednoczonych do Spraw
Oświaty, Nauki i Kultury



Europejskie Regionalne
Centrum Ekohydrologii
pod auspicjami UNESCO



Kutno County, Poland

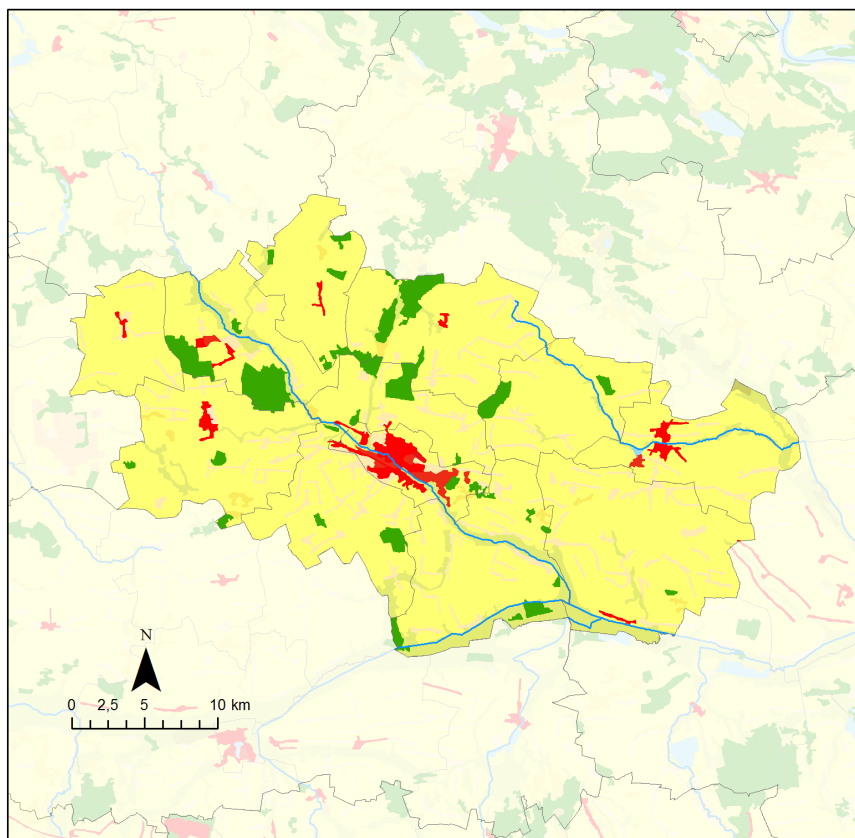
Main task and responsible partners

- Multi-actor cooperation at local level for increased water retention
- New type of agricultural advisor service connected with water management
- Spatial planning as a tool for water management in agricultural areas (connected with GA3.3)



Kutno County, Poland

The Kutno County is NUTS 4 administrative units of the Lodzkie province, and includes 10 communes



LEGENDA

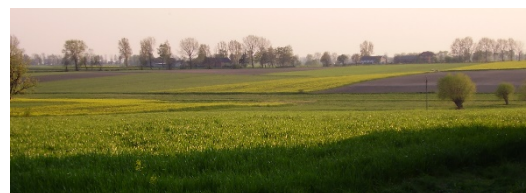
- Strefy zurbanizowane
- Grunty orne poza zasięgiem urządzeń nawadniających
- łąki
- Złożone systemy upraw i działek
- Lasy

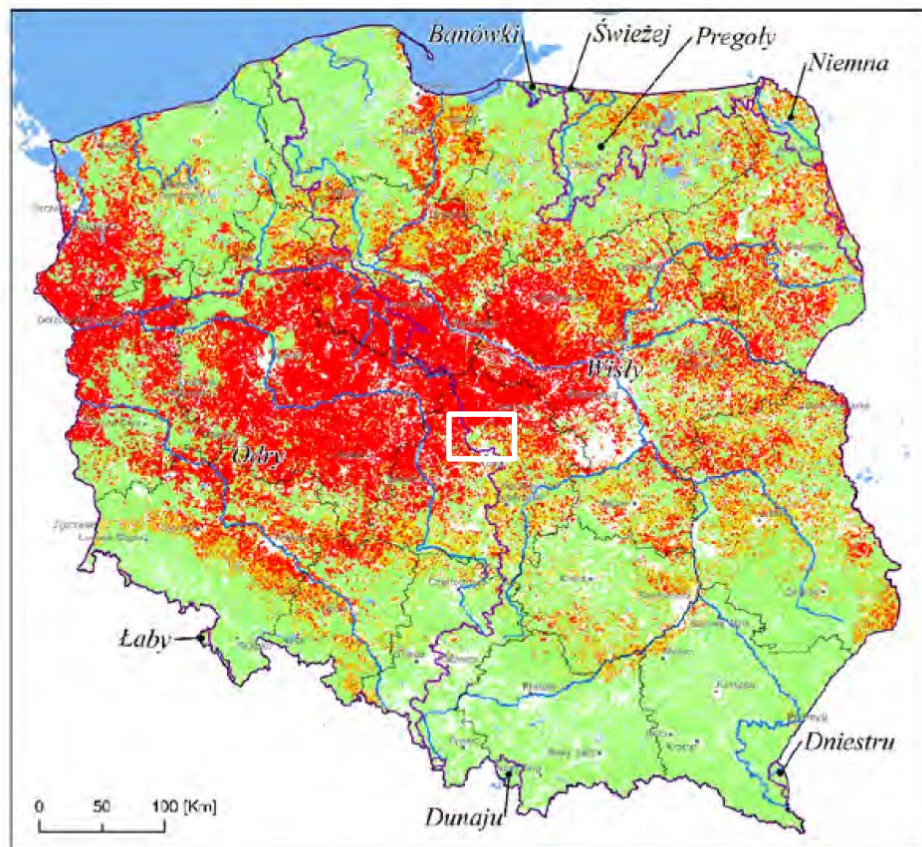
Area: 88 629 ha

Total agricultural area:
86%

Arable land: 77%

Forest: 5%

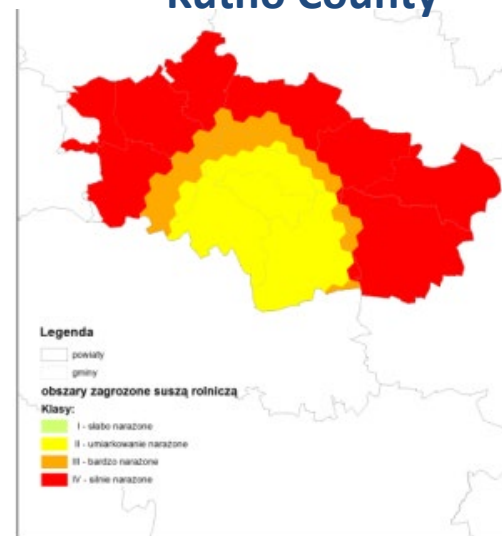




Mapa klas zagrożenia suszą rolniczą na obszarach
gruntów ornych, łąk, pastwisk i terenach leśnych (1997-2018)

- klasa I - niezagrożone
- klasa II - umiarkowanie zagrożone
- klasa III - bardzo zagrożone
- klasa IV - ekstremalnie zagrożone

Kutno County



Legenda

- powiaty
- gminy

obszary zagrożone suszą rolniczą

Klasy:

- I - słabo narażone
- II - umiarkowanie narażone
- III - bardzo narażone
- IV - silnie narażone

**Very high level of threat of
agricultural drought
occured in 38% of agricultural
area in Poland (1997-2018)**

(Źródło: Projekt planu przeciwdziałania skutkom suszy)

Kutno County, Poland

Strategic tasks/goals in the catchment

Adaptation of agriculture to climate change through optimization of production structure and implementation of measures to increase water retention.

Increased water retention is possible through:

- (1) cooperative renovation and management of the drainage system to slow down water outflow,
- (2) using good agricultural practices to increase soil water retention, and
- (3) optimization of landscape structure for regulation of water cycle.

Kutno County, Poland

Focus group

- Water companies (in Polish: spółki wodne)
- Catchment and Regional Water Management Authorities
- Regional authorities in case area
- Local authorities in case areas
- Agricultural advisors
- Farmers
- Landowners
- Local community
- Planer offices
- NGOs
- Financing agencies

Kutno County, Poland

Focus group - Main actors

- **Water companies (*in Polish: spółki wodne*)**
 - Voluntary association of farmers who own the land with drainage system.
 - Budgeted with voluntary contributions paid by farmers
 - A municipality may also be a member (a public-private structure)
 - They can raise funds for investment
- **Local, Catchment and Regional Water Management Authorities (administrative units of the National Water Holding 'Polish Waters')**

Responsible for water resources management (surface and groundwater),
e.g.:

- Planning of flood and drought protection measures
- coordination of the implementation of investments in water regions,



Kutno County, Poland

Done so far....

1st National WATERDRIVE Meeting - Kick off meeting under honorary auspices of the Marshal of Łódzkie Region

13.06.2019, Łódź



Ab. 100 participants; water companies from Łódzkie Voivodeship , local authorities from Kutno County, regional authorities, agricultural advisors form 4 voivodship, spatial planner

Kutno County, Poland

Multi-actor cooperation at local level

(what to do when and how?)

P1-P3



1. Identification of needs and expectations of water companies,
2. Recognition of the structure and competencies of respective administrative levels of the "Polish Waters",
3. Data availability analysis (including stakeholders' databases)
4. Launching of the focus group aimed at increasing water retention with river channel retention, agricultural practices, and landscape shaping measures in Bedlno commune.
5. The joint operation on existing hydrotechnical infrastructures for increased river channel retention in the Bedlno commune



Water management in agricultural landscape as an important factor in adaptation to climate change and reduction of drought effects

20.08.2019, Łódź

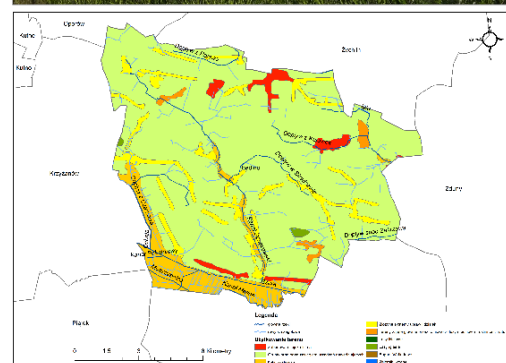
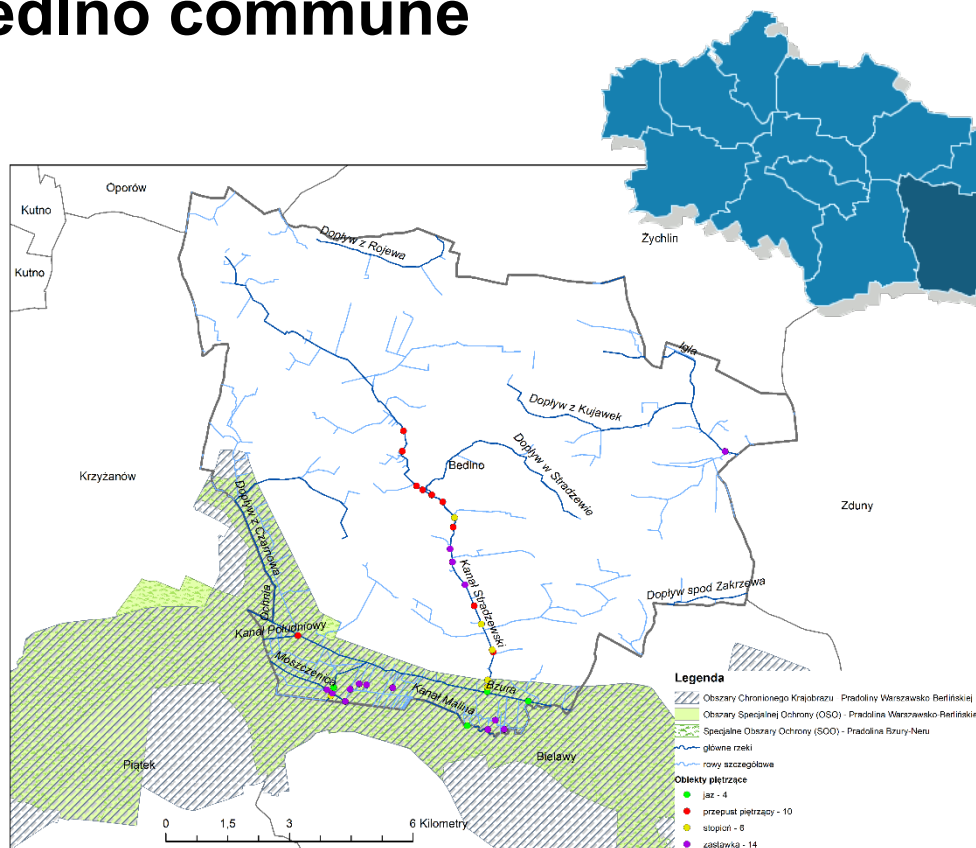
organized by Marshal Office of Łódzkie Voivodship



Ab.100 participants, water companies from Łódzkie Voivodeship and representatives of National Water Holding 'Polish Waters'; opening lecture by Prof. M. Zalewski (director ERCE PAN)

Kutno County, Poland

Selected implementation area: Bedno commune



Kutno County, Poland

1st Local WATERDRIVE Meeting, 6th Feb. 2020, Bedlno

45 participants:

Ab. 20 farmers from testing area (water company, farmers, community council),
5 representatives of National Water Holding
'Polish Waters' (local, catchment, regional
and national level), water companies and
local authorities from Kutno County,
regional authorities, agricultural advisors,
experts



Kutno County, Poland

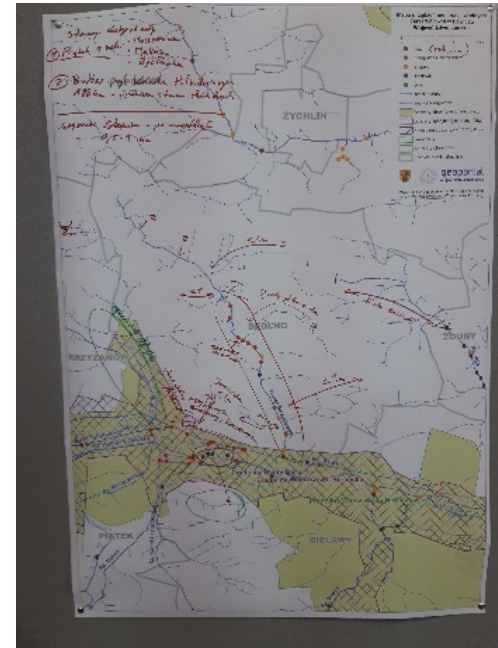
1st Local WATERDRIVE Meeting, 6 Feb. 2020, Bedlno

Interactive workshop:

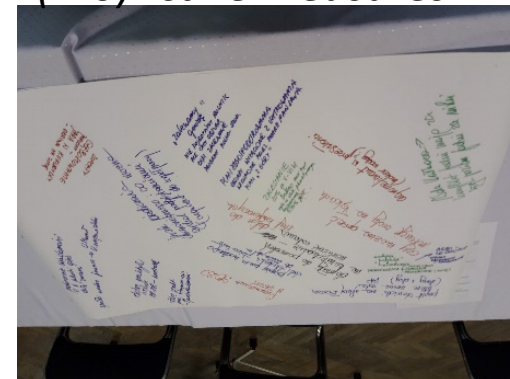
- the selection of the area to demonstrate water retention increase through controlling the outflow from drainage system (the so-called **river channel retention**)
- the possibilities and limitations of the implementation of targeted **agricultural practices** (catch crops, deepening, selection of the sowing direction) and **landscape shaping measures** (buffer zones, afforestation, mid-field bushes and trees, wetlands).



Reactive measures



(Pro)Active measures



Kutno County, Poland

Joint operation on existing hydrotechnical infrastructures by Polish Waters and Bedlno water company facilitated by the Lodzkie Marshal Office
April/May 2020



Kutno County, Poland

P1-P3

New type of agricultural advisor service connected with water management – the policy case

(what to do when and how?)

1. Defining a scope of water related services within public agricultural advisory ones with:
 - the questionnaire covering a representative group of the public agricultural advisors,
 - direct formal and informal meetings with farmers and online questionnaires focused on needs of CA farmers with respect to the new type of agricultural advisory services;
 - institutional mapping of the key actors involved in water management.

Kutno County, Poland

P1-P3

New type of agricultural advisor service connected with water management – the policy case

(what to do when and how?)

2. Establishing under CDR a multidisciplinary team of experts consisting in representatives of Polish Waters, advisory services, and researchers.

The main task of the team is to outline the scope of water services to be included into the national system of public advisory system, and to prepare a special report for the Ministry of Agriculture and Rural Development based on experiences of CA and contributing to better implementation of the new type of advisory services.

**P4-P5**

Kutno County, Poland

1. Recognising the acceptability of nature-based solutions by farmers
2. Participatory mapping of potential areas increasing landscape water retention in Bedlno Commune
3. Co-design of new water damming system both on state and private lands in Bedlno commune
4. Co-creation of the Integrated Action Plan for the Bedlno commune for increased water retention
5. Development of guidelines and identification of formal pathways to replicate the Bedlno process, to be made available to other water companies/municipalities
6. Hints for development of the training tools for spatial planners and people who can/should join planning processes at the local and regional.
7. Elaborated profile of the new agricultural advisory services (based on contribution of agricultural public advisors, CA farmers, and external experts).
8. Institutional mapping of the key actors relevant for improved rural water management (regional and national scale).