

Modernisation of irrigation systems in Baia, Tulcea County

Farm irrigation funds from CAP in Romania are helping to boost the resilience of local agriculture.

EAFRD-funded projects

Country: Belgium

Location: Baia Commune

Programming period: 2014-2020

RDP Priority: P5. Resource efficiency and climate

Focus Area: Water use efficiency

Measures: M04. Investments in physical assets

Funding: Total budget 2 802 703 (EUR)

EAFRD 2 382 297 (EUR)

National/regional 420 406 (EUR)

Timeframe: 20.06.2018 - 24.04.2021

Project promoter: Zmeica Organization of Water Users for Irrigation / Organizația Utilizatorilor de Apă pentru Irigații din Zmeica (OUAI)

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Summary

Tulcea County ranks second in Romania - after Constanta County - as the largest territories affected by drought. This was caused by a combination of factors, including the loss of common irrigation systems, prolonged droughts and limited management capacity. Using the opportunities and support provided by the Rural Development Programme together with the ITI mechanism, The Organisation of Water Users for Irrigation (OUAI) 'Zmeica' was able to take active steps towards reviving agriculture in the Danube Delta by installing new and more efficient irrigation technologies.

Project results

- The modernisation of the three pumping stations, allowed for an area of approximately 4 000 hectares to be irrigated more efficiently and with reduced water loss.
- The project and its results are visible and recognised by the farmers and administration as well, indicating economic viability.

Lessons & Recommendations

- In Romania there are high levels of demand for investment support in the modernisation of irrigation systems, with many Organisations of Water Users for Irrigation applying for and receiving support in the form of Common Agricultural Policy (CAP) funding.



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Context

Agriculture in Romania's Dobrogea territory (Constanta and Tulcea counties) had experienced acute challenges due to a combination of factors. These included: the loss of a common territorial irrigation system after 1990; prolonged drought with the resulting arid conditions; and limited management capacity. At the beginning of 2000, the irrigation infrastructure in the Danube Delta covered 138 940 ha (38%) but was predominantly privately owned. To date, with about 129 000 hectares affected by drought, Tulcea County ranks second in Romania - after Constanta County - as having the largest area affected by this climate challenge.

The Organisation of Water Users for Irrigation (OUAI) 'Zmeica' was established in 2005 in Baia, Tulcea County, and promotes the modernisation of the commune's irrigation systems. Using the opportunities and support provided by the Rural Development Programme together with the ITI mechanism, the OUAI was able to install new and efficient irrigation technologies to help revive agriculture and to exploit its potential.

Objectives

This project aimed to modernise the irrigation systems of three plots covering 4 000 ha in Baia commune.

Activities

The works to modernise the three pumping stations and irrigation systems included:

Modernisation of the pressurisation station - buildings

- Replacing the metal carpentry in the stations with aluminium carpentry with double glazing; installing new interior and exterior finishes; installing wooden frames and galvanised sheets for cladding and heavy traffic linoleum floors, new interior electrical installations for lighting and sockets and new electrical power installations.

Modernisation of the pressurisation station - equipment and water tanks

- Installing electric pumps with vertical shafts of different capacities and with a complete pump assembly, shaft line and electric motors with control panels and frequency converter controls.

- Mounting the pumps on the floor of the tank and extracting the water from the tank (which is made of reinforced concrete) from a depth of 3.8m, ensuring the submergence of the pumps at least 2.5m.
- Installing a common collector for discharging water, mounted above ground on the floor of the tank. The collector is mounted at 1.5m and connected to the irrigation pipe.

Preparation of a new discharge pipe

- The irrigation network is supplied with water from the Golovița Lake through an abduction channel. The connection of the discharge pipe to the network of buried pipes of one of the irrigation systems (covering 1 065 ha), was made in an existing chimney of reinforced concrete. On the discharge pipe, three valve chambers of prefabricated concrete were constructed.



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Main results

- The modernisation of the three stations enabled an area of approximately 4 000 ha to be irrigated more efficiently and with reduced water loss.
- The project and its results are visible and recognised by the farmers and administration as well, indicating economic viability.



Key lessons

- The European Agricultural Fund for Rural Development (EAFRD) investment funds allocated through sub-measure 4.3 - *'Investments for the development, modernization or adaptation of agricultural and forestry infrastructure'* - for modernising irrigation were quickly exhausted just a few months after the annual calls. This attests both to the need for irrigation financing as well as to the success of the implemented projects.
- The increased number of Organisations of Water Users for Irrigation (OUAI) is due to several administrative measures that were applied, together with institutional partners. One of the measures was the expansion of the area targeted for these types of investments from 628 000 ha to over 1 800 000 ha. Also, from an initial EUR 150 million in the 2007-2013 programming period, it grew to a total allocation of EUR 441 million in the 2014-2020 programming period.

Additional information:

www.itideltadunarii.com/exemple-de-bune-practici/irigatii-baia-pndr/67

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