

# Strengthening Water Users Associations

Increasing the Efficiency of Irrigation through Farmer Participation and Demand Management

### Importance of Case to IWRM:

Developing a framework to replace a central approach with a participatory, demand-driven approach for more sustainable water resources management is a long and complex process. Farmers, through participation in water users associations, were identified as the appropriate level to implement decisions for onfarm irrigation and to better coordinate management of water and the rich agricultural soils of the Danube River valley.

#### **IWRM Tools:**

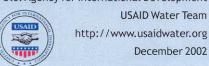
- \*B1.6 Civil Society Institutions and Community-Based Organizations;
- \*B2.1 Participatory Capacity and Empowerment;
- \*C3.1 Improved Efficiency of Use \*C4.2 Training of Professionals
- \*See http://www.gwpforum.org/ iwrmtoolbox for more information on reference-numbered tools.

#### Keywords:

irrigation; water users associations (WUAs)

The purpose of this case study series is to familiarize Missions and Regional Bureaus with practical approaches to integrated water resources management (IWRM) that have proven to be successful in U.S. Government and USAID field programs. The case was contributed to the Global Water Partnership Toolbox on IWRM at http://www.gwpforum.org.

U.S. Agency for International Development



## Case Summary

Agriculture is an important sector in Romania's economy, currently providing 14% of GDP and 37% of employment. Prior to the 1989 revolution, agriculture was a strong export sector but today food imports are necessary. The shift from a centralized economy in 1990 to a market-oriented system and the redistribution of land (from state farms to the former owners) disrupted agriculture and the organization and maintenance of irrigation systems. Although the majority of cropped area is rain-fed, droughts are common in the semi-arid climate especially during the summer growing season, and yields are uncertain without irrigation. The World Bank has scheduled a loan to Romania for irrigation rehabilitation and reform in the Danube River valley. Complementing this effort, USAID is funding a project to develop and strengthen water users associations (WUAs) to own and operate the equipment for on-farm water distribution. Effective WUAs are a critical component of restructuring Romania's irrigation systems and increasing the efficiency of irrigation through farmer participation and delivery of irrigation water on demand. Through technical assistance and training, USAID is providing institutional strengthening to help farmers organize into WUAs and gradually take charge of managing onfarm irrigation operations.

A Water Users Associations Law was recently adopted providing that voluntary, non-profit WUAs should be formed to own and operate the equipment for on-farm water distribution. Typically, WUAs should consist of members owning or leasing adjacent plots of land within the hydraulic area covered by an irrigation pumping station. Government policy is to gradually reduce irrigation subsidies and even-

tually WUAs should be sustained on water charges and membership fees collected from their members. This requires WUAs capable of providing cost-effective irrigation services and an agricultural system capable of commercial production.

Ongoing training and technical assistance is supporting WUAs and relevant government agencies with the tasks and duties regarding WUA organization, management, financial administration, and operation and maintenance (O&M) of the irrigation system. Training of farmers will explain WUAs and the rights and obligations of WUA members. WUAs need new approaches to O&M and financial administration to achieve more cost-effective irrigation. Farmers must be organized to formulate cropping and irrigation plans and monitor implementation. The ability of WUAs to implement a cropping pattern that yields market returns, covers the cost of irrigation, and increases farmer incomes will be key to their long-term suc-



Irrigated field with modern sprinkler irrigation equipment is operated by the Cosmesti WUA on the Siret River in the Galati District. One of the most important objectives of the WUA Development Project is to support the commercialization of Romania's agricultural sector.



WUAs meet in Tecuci to discuss organizational issues. USAID is currently supporting the development and strengthening of WUAs in Romania through training and technical assistance.

cess. Access to credit to obtain capital for repair and replacement of irrigation equipment is also important for sustainable agriculture.

#### For Additional Information

For a complete case report on how the associated IWRM tools were implemented, see http://www.usaidwater.org or http://www.gwpforum.org.

#### References

International Network on Participatory Irrigation Management web site: http://www.inpim.org

Electronic Handbook on Participatory Irrigation Management, Environment and Natural Resources Division, World Bank Institute, http://www.worldbank.org/wbi.pimelg

USAID/PA Government Services Water Users Association Development Project web site: http://www.wuadp.ro

## Organizations and People

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The main canal delivers water to pump stations that will lift water to the terrace for irrigation.

## Lessons Learned

Lessons from the early stages of WUA development include:

- Appropriate legislation and regulations are necessary to allow all stakeholders (farmers, WUAs, government agencies) to carry out their respective roles and facilitate farmer participation for demand-driven irrigation water management.
- Irrigation subsidies may be needed to support agriculture until farming efficiency improves and returns from the sale of agricultural products can cover costs.
- The irrigation subsidies should be targeted directly to water users with transparent linkages between the government agencies and the water users.
- Irrigation equipment transferred to WUAs must be in good condition to translate potential into effective demand for irrigation water and support sustainable agriculture.
- WUAs and their members need knowledge and experience to make management decisions associated with irrigated farming, such as assessment of crop water requirements and irrigation scheduling.