

## **Deriving Rural Water and Sanitation Cost Functions for EECCA**

### ***Objective***

To develop a transparent and empirically robust tool to prepare estimates of costs of achieving water related millennium development goals in rural areas of EECCA. This will be done by deriving empirically tested and statistically robust cost functions for rural water supply and sanitation technologies available in EECCA region. These cost functions will be integrated with the FEASIBLE2 model used to develop financing strategies for investment heavy water and environmental infrastructure. The model will be available as public domain to all interested researchers, financial analysts and policy makers. This activity will provide an input to the EU Water Initiative.

### ***Background***

A number of rough estimates of the financial needs of reaching Millennium Development Goals related to water supply and sanitation in EECCA countries have been conducted recently by the World Bank, by the Danish Environmental Protection Agency (DANCEE) and by the OECD/EAP Task Force. Many of these estimates were related to the EU Water Initiative (cross-cutting Financing Component).

It is now internationally recognized that there is a need to revisit and verify these preliminary estimates in the selected, medium income and poorest EECCA countries and regions with substantial proportion of rural population applying a transparent and internationally credible methodology. Such methodology should include a transparent and realistic data base and cost functions for rural water and sanitation technologies available in EECCA, from basic to more advanced. The policy relevance and usefulness of such methodology can be additionally improved by linking it with the public domain tools for developing infrastructure investment programs and financing strategies, such as the FEASIBLE model developed jointly by the Danish government and the OECD as a public domain and successfully applied in a number of transition economies for urban water and environmental infrastructure.

### ***Activities***

- To compile a comprehensive data base of water supply, sanitation and wastewater collection and treatment technologies for rural areas available in developing countries and transition economies (in particular in EECCA countries);
- To calibrate cost functions of these technologies for the EECCA region on the basis of real data;
- To endogenize these cost functions into the FEASIBLE 2 model or develop a compatible software application linked to FEASIBLE 2.
- To write an additional methodological, technical annex into the users' manual of FEASIBLE 2.

### ***Outputs***

- Database with rural water supply, sanitation and wastewater collection and treatment technologies;
- Cost functions for these technologies, calibrated for EECCA
- Software complimentary to the FEASIBLE 2 software to be integrated with the FEASIBLE 2 tool;
- Technical annex to FEASIBLE-2 users manual.

### ***Benefits/Outcomes***

The project will facilitate development of realistic investment programs and financing strategies for water supply and sanitation sector which covers also rural areas and are credible to financial institutions and potential investors.