An integrated approach to Water Statistics

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ABSTRACT: Pilot environmental surveys on waste and water were run for the first time in Romania during 2003/04 in the context of approaching Compliance with the European statistical system with EU-Phare funding and support.

A pilot direct survey on **water** was conducted for the Mures river basin. The main objective of the direct survey was to achieve a unitary and coherent data collection on water flows (abstraction, supply, discharge and treatment system) from specialised units, industrial units and the agriculture sector.

This was done by means of three different direct surveys:

- Specialised Units engaged in Water Abstraction and Use & Urban Wastewater Collection, Treatment and Discharge, for public purposes were investigated in an exhaustive manner;
- Industries involved in Water Use and Supply (by means of source) & Wastewater Generation, Collection and Discharge were weighed through stratified sampling;
- Agricultural enterprises performing irrigation were observed on a sampling basis (but exhaustively for irrigated areas of more than 100 hectares).

To enlarge the coverage of the water use in agriculture, specifically in the zoo-technical sector, an exercise of estimating the water consumption of different types of farm animals was performed, by applying to the stocks of animals available from the data of the agricultural census and its updates, coefficients derived from international standards.

During the analysis of the preliminary results in Romania, it was noticed that some significant areas were not served by Specialized Units (mainly in rural areas). The household water consumption and waste water generated which were not covered by specialized units were estimated with coefficients.

A lesson learned is that the integration of different sources and methodologies should conveniently be pursued for broader coverage of the phenomenon, consistency validation, cost effectiveness, deeper data analysis.