

Water and wastewater statistics in Hungary

Pál Bóday Head of Section Pal.Boday@ksh.hu



Statistics and Environment





Water in FDES

- 1.1.1.b Precipitation
- 1.1.2 Hydrographical characteristics
- 1.3.2 Freshwater quality
- 1.3.3 Marine water quality
- 2.6.1 Water resources
- 2.6.2 Abstraction, use and returns of water
- 3.2.1 Generation and pollutant content of wastewater
- 3.2.3 Discharge of wastewater to the environment
- 4.1.1 Occurrence of natural extreme events and disasters
- 5.1.2 Access to selected basic services
- 5.2.2 Water-related diseases and conditions
- 6.1 Environmental Protection and Resource Management Expenditure
- 6.2 Environmental Governance and Regulation



Data Sources

- Hungarian Central Statistical Office
 - Public water management of settlements
 - Agricultural water use annual agricultural survey
 - Environmental protection expenditure
 - Popultaion census
- General Directorate of Water Management
 - Water abstraction from ground water
 - Water abstraction and return from/to surface water
 - Agricultural water use
 - Industrial water use
 - Register of water users



Data Sources

- National Institute of Environmental Health
 - Water quality
- Hungarian Energy and Public Utility Regulatory Authority
 - Permission for public water utility services
 - Price regulation
- Research Institute of Agricultural Economics
 - Agricultural water use



Data Sources

- Several stakeholders
- Ovrelaping information
- Quality issues
- Data collection systems
- Communication
- Reorganizations



Public water management of settlements

- Started in 1961
- By settlements
- Restructured several times
 - Reduction in level of details
 - Water and wastewater quality
 - Fees, prices
 - Reduction on content
 - Investment
 - Sewage sludge



Public water management of settlements

- Water abstraction
 - surface/ground water, water transactions, losses
- Provided water
 - · Households, agriculture, industry, energy, other
- Potable water pipe system
 - Length and connected dwellings
- Waste water pipe system
 - Length and connected dwellings (dwellings not connected)
- Waste water
 - Collected wastewater
- Waste water treatment plants
 - Quantity, type of treatment, pollutants inflow/outflow
- Fees and prices



Public water management of settlements

Response

rate – finally 100% deadline - not everyone is on time clarifications, error handling Data provider centralization - sub-units accountant - not expert on water and wastewater Questions on quality - not always measured estimation – not willing to provide

Collect what is needed, and what will be processed



Dissemination, data users

- National
 - Publications
 - Disemination tables / database
 - Indicator sets
- International
 - Eurostat/OECD joint quesstionnaire
 - Eurostat regional questionnaire
 - FAO
 - European Environmet Agency
- Users
 - Policy makers
 - Researchers, students
 - Municipalities, investment companies
 - Statistical use



Indicators

- Population connected
- Difference between connected population to water and waste water
- Effectiveness of wastewater treatment

 Different factors for different level of treatment