

# Economic mechanism for water resources management in Romania

Gheorghe Constantin

Director

Ministry of Environment, Water and Forests

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- The water resources from Romania surface waters – inland rivers, natural and reservoirs, Danube river and ground waters.
- There are 78,905 km watercourses – only 22,000 km are monitored and used for economic purposes.
- Romania ranks amongst countries with relatively low water resources: disposing of only 1,840 cubic meters water/inhabitant/year from surface sources, compared with 4,000 cubic meters water/inhabitant/year in Europe.
- Around 250 cubic meters water/inhabitant/year comes from ground water (the potential usable amounts 5.5 billion cubic meter/year).

# History of the economic mechanism in Romania

- Governmental Decision 1001/1990 concerning the establishment of a unitary system of payments for water management products and services
- Water law 107/1996
- Emergency Governmental Ordinance 107/2002 concerning the establishment of the National Administration “Romanian Waters”
- Law 310/2004 for the modification of the Water Law 107/1996

# Governmental Decision 1001/1990 concerning the establishment of a unitary system of payments for water management products and services

- **Objectives:**

- Water protection and conservation
- Implementation of the market economy principles
- Increase the role of the economic solutions
- Ground the national water management system on economic principles

# General provisions on rational water management of the GD 1001/1990

- Reduction of the water consumption
- Water recirculation and reuse
- Minimizing water losses
- Specific consumption for water uses (industry, agriculture, households)
- Water metering

# Economic mechanism for water management introduced by GD 1001/1990

- Prices
- Tariffs
- Penalties

# Prices and tariffs

- Delivery prices for water products
- Tariffs for services provided by the water management units
- Applied to all water uses
- It was mentioned for hydropower from the sea
- Supplementary tariffs for water utilities units
- Water management units were the only authorities to charge prices and tariffs for raw water
- Prices and tariffs for raw water from water resources established by the Ministry of Environment
- Prices and tariffs delivered by the water utilities units established by the local councils

# Water management penalties

- Imposed for water abstraction and waste water discharged
- Penalties applied by water management units and water utilities units
- Collected penalties were transferred to the Water Fund
- Urban water utility could use up to 25% for their development works
- The penalties were applied gradually
  - 25% in 1991
  - 50% in 1992
  - 75% in 1993
  - 100% from 1994



# Establishment of the Water Fund

- Consisting of 5% from collected water prices and tariffs and 100% from penalties
- Use to finance works for:
  - improving water quality
  - improving water monitoring
  - water flow regulation
  - flood control
  - improving public participation

# Water prices

- Water from inland river
  - per type of use
- Water from the Danube
  - per type of use
- Water form the underground water
  - per type of use

# Water tariffs

- Receiving discharged substances into the water
  - quantity per parameter
- Achieving hydropower potential
  - per installed power
- Solid matter discharge management for sand and gravel exploitation
  - -per cubic meter

# Water penalties

- Exceeding the abstracted volumes and discharges provided in the water license
- Exceeding the abstracted volumes and discharges provided in the restriction plans
- Exceeding the groundwater abstracted volumes and discharges provided in the water license
- Using water without water license
- Using the water in other purposes than one provided in the water license
- Exceeding the daily average values of the discharged water quality indicators mentioned in the water license

# Water Law 107/1996

- Established a new economic mechanism for water management
- Provided that water is a natural resource with economic value in all forms of its use
- Underlined that water conservation, reuse and saving are encouraged by application of economic incentives for those which protect water quality and quantity and penalties for those which waste and pollute water
- Legislate the system of prices, tariffs, penalties and bonifications

# Water Law modified by Law 310/2004

- Transposed the provisions of the Water Framework Directive into Romanian legislation
- Introduced the cost recovery for water services based on the economic analysis of the water use looking for an adequate contribution of different uses
- Establishing a system of contribution, tariffs, payments, bonuses and penalties
- This system is applied to all water users with the exception of navigation
- The National Administration “Romanian Waters” is the only entitled to apply the economic mechanism for water management

# Specific contributions for water

- Contribution for water resources use on the resource and users categories
- Contribution for receiving waste/used waters in the water resources
- Contribution for the hydropower potential ensured through the dams of the reservoirs being under National Administration “Romanian Waters” administration
- Contribution for sand and gravel exploitation from river bed and river banks

# Bonuses and penalties

- Bonuses are granted to the users which demonstrate a constant, particular attention for the rational use and water quality protection constantly discharging waste water with lower concentration than those provided in the water license.
- Penalties are applied to those water users which are not meeting the provisions of the water license both for exceeding water quantities used as well as the concentrations of the polluted substances discharged in the water resources



# Financing of the water management system

- State budget for the construction of the national infrastructure
- National Administration “Romanian Waters” budget for the operation, maintenance and repairs of the water national infrastructure
- National Administration “Romanian Waters” budget for running, maintenance and upgrading of the national water quantity and quality monitoring system
- State budget and National Administration “Romanian Waters” budget for implementation of the obligation deriving from bilateral and regionale agreements in the water field
- Local budget for construction and maintenance of the local infrastructure

# Emergency Governmental Ordinance 107/2002 for the establishment of the National Administration “Romanian Waters”

- National Administration “Romanian Waters” is a legal person functioning on the base of economic autonomy in the coordination of the central authority for water management
- Financing of the National Administration “Romanian Waters” will be ensured from its revenue resulted from the application of the economic mechanism specific in the water field.
- National Administration “Romanian Waters” has the right to apply bonuses and penalties
- Define the common water services

# Level of contributions for surface water use

- For households, public institutions, etc. -0,011 Euro/cm
- For thermo power and nuclear power plant -0,0053 Euro/cm
- For hydropower - 0,00024 Euro/cm
- For irrigation – 0,00066 Euro/cm
- For aquaculture– 0,00011 Euro/cm

# Level of contributions for groundwater use

- For households, public institutions, etc. -0,012 Euro/cm
- For industry -0,012 Euro/cm
- For livestock - 0,012 Euro/cm
- For irrigation – 0,012 Euro/cm
- For aquaculture– 0,0024 Euro/cm

# Contribution for discharging waste water

- Total suspended solids -0,025 Euro/Kg
- Nitrates – 0,0103 Euro/Kg
- BOD<sub>5</sub> -0,0103 Euro/Kg
- Manganese – 0,103 Euro/Kg
- Aluminum, Iron – 0,124 Euro/Kg
- Arsenic – 8,043 Euro/Kg
- Cyanide – 8,043 Euro/Kg
- Mercury – 10,34 Euro/Kg
- Lead – 2, 586 Euro/Kg

Thank you very much for your attention !

