

# Water supply and sanitation system in the Republic of Moldova.

Mr. Gutu Sergiu, Agency "Apele Moldovei", The Republic of Moldova  
10-12 of March 2009, Plock, Poland



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# REPUBLIC OF MOLDOVA:

AREA: 33,843 SQ. KM.

CAPITAL—CHISINAU.

CLIMATE: MODERATE WINTERS,  
WARM SUMMERS.

TIME ZONE: GMT+2

TOTAL POPULATION: 4,2 MLN.

RURAL POPULATION: 59%

URBAN POPULATION: 41%

PER CAPITA GDP (2007): \$1,259



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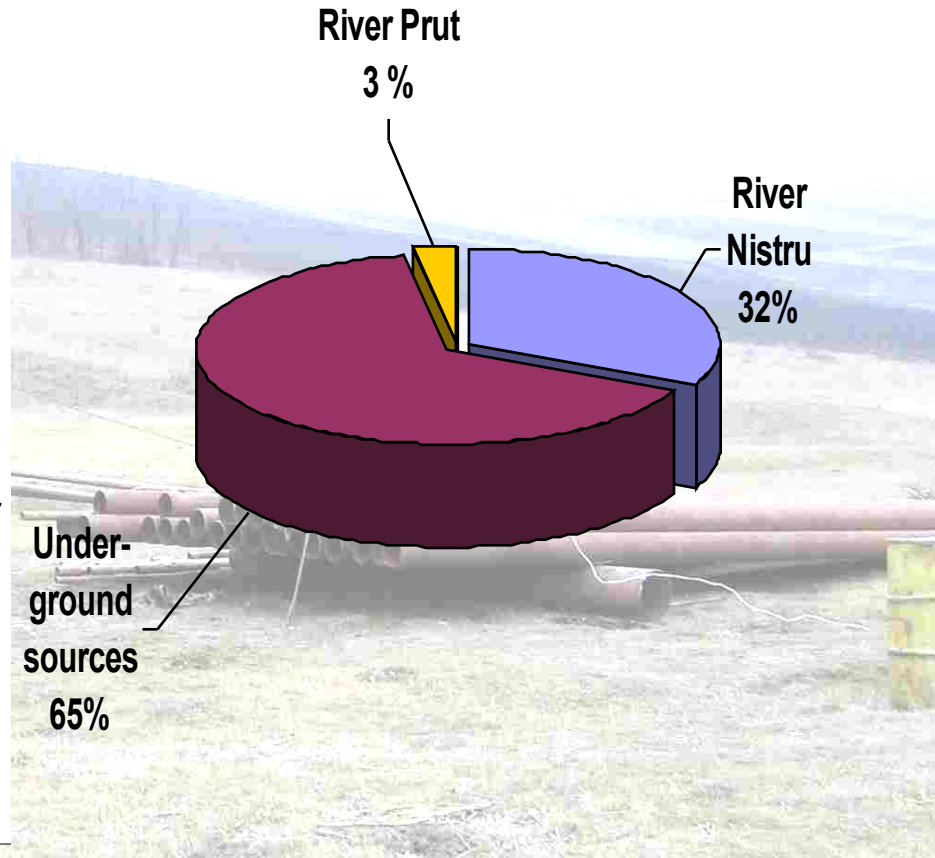
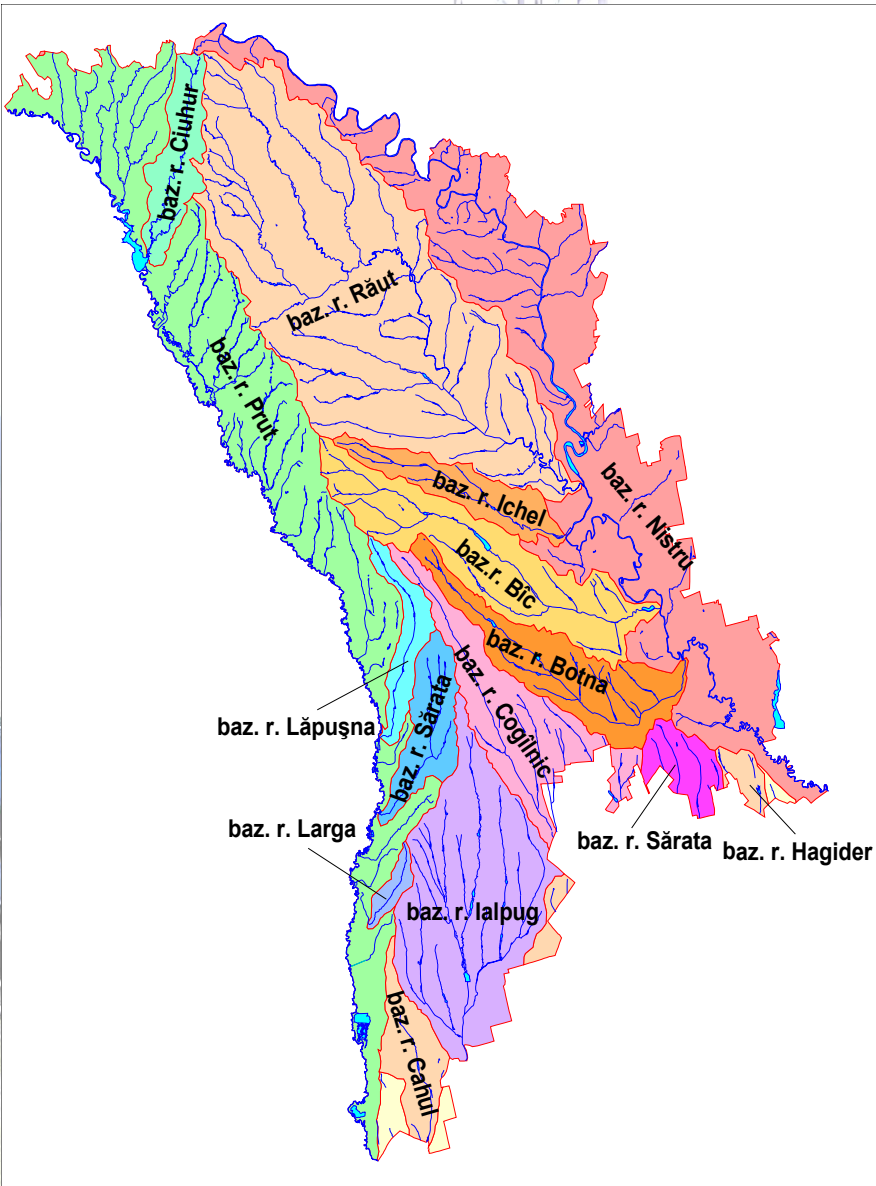


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# Main resources of potable water



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# STAKEHOLDERS

- The Parliament
- Office of External Assistance Coordination under the Prime Minister
- Agency “Apele Moldovei”
- Ministry of Ecology and Natural Resources
- The State Geological Agency
- The State Ecologic Inspectorate
- Ministry of Health
- Water utilities “Apa-Canal”
- The State Engineering Institute “ACVAPROIECT”
- The State Engineering Institute “IPROCOM”
- NGOs



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# INTERNATIONAL ACTORS

- European Union
- World Bank
- EBRD
- EIB
- USA
- Kuwait Fund for Arab Economic Development
- Government of Austria
- Government of Switzerland
- Government of Czech Republic
- Government of Republic of Turkey
- Government of Germany



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# WATER SUPPLY FROM CENTRALIZED SYSTEMS

- There are 3 large municipalities, 53 towns and about 1 480 rural communities. **1032** localities, including **3** municipalities, **52** cities (**100%**) and **977** villages (**66%**) have piped water systems.
- **1,994** mln. inhabitants have access to centralised systems of water supply, of which **1,136** mln. dwellers from urban localities and **858** thousand from rural localities.
- From total number of **1998** centralised systems of water supply:
  - 1015** are in satisfactory condition;
  - 870** require reconstruction;
  - 113** can not be rehabilitated.
- Average water consumption **163 liters/cap/day**
- The total length of water networks constitute **8994** km, and **3725** km require rehabilitation.



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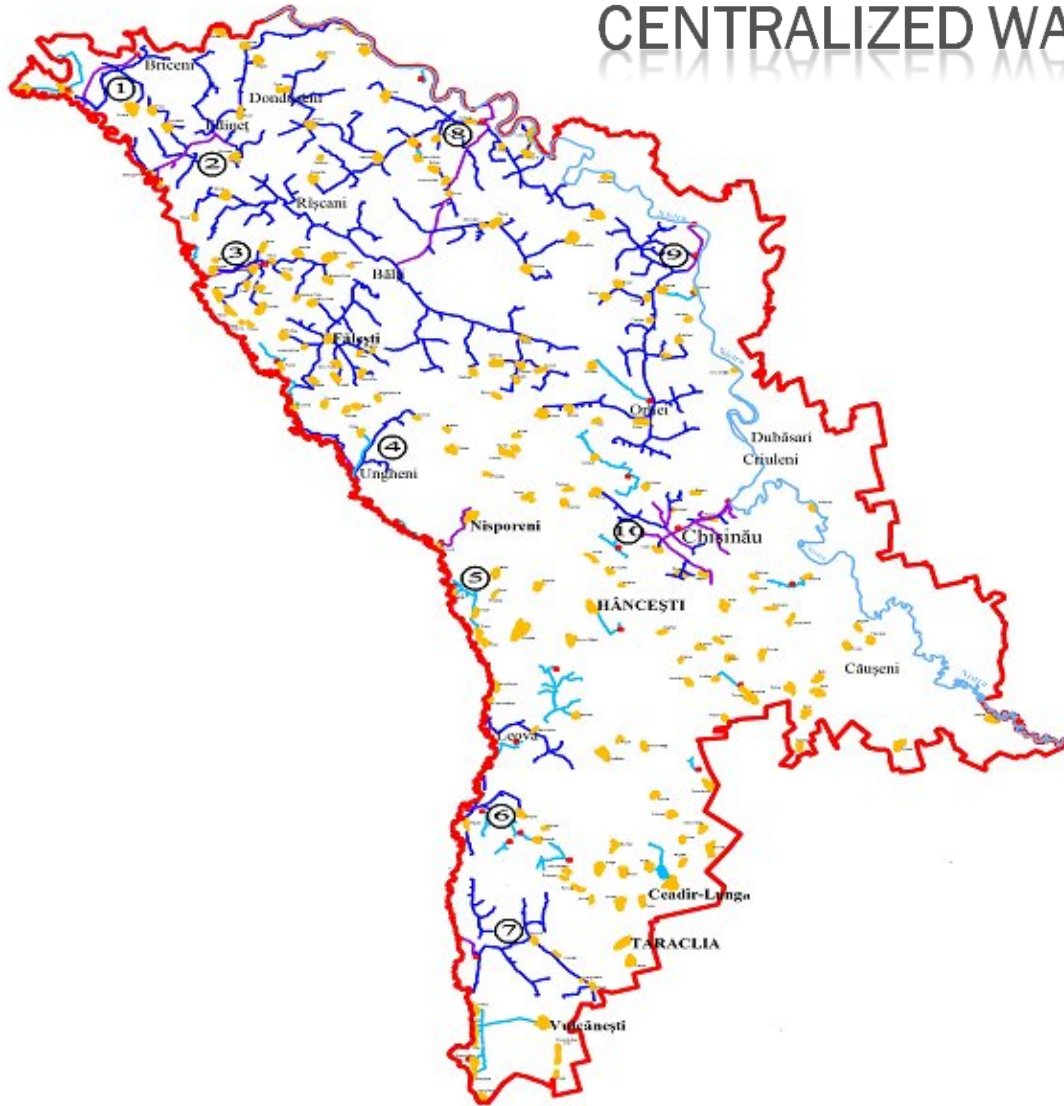
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# CENTRALIZED WATER SUPPLY NETWORKS



Operation period:  
over **35-40 years**

Average water loses:  
over **50%**



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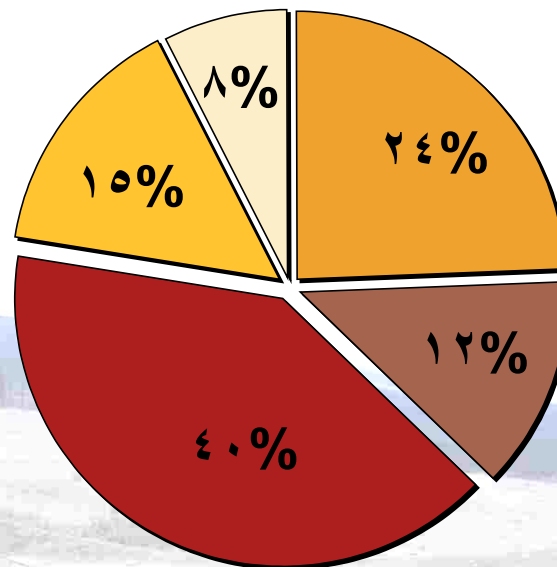
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# PUBLIC SANITATION SYSTEMS

- **623** localities have public sanitation systems, of which **3** municipalities, **52** cities and **565** villages.
- **251** localities have centralised water supply and sanitation systems
- **49%** of the population live in the region with no sanitation.



- satisfactory condition
- requires current repair
- requires capital repair
- deteriorated
- unfinished



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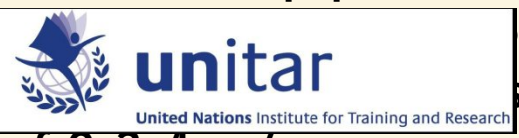
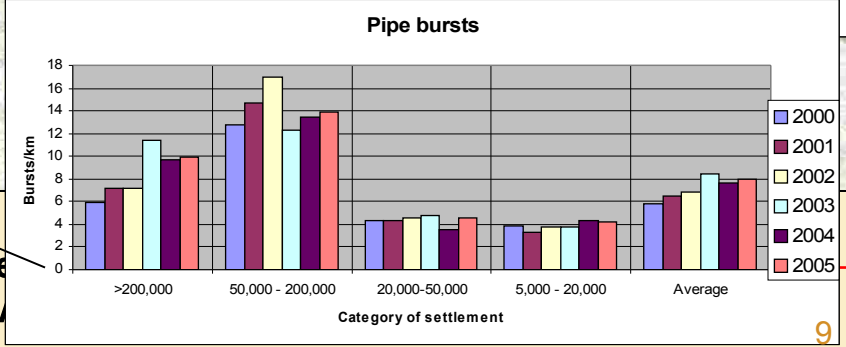
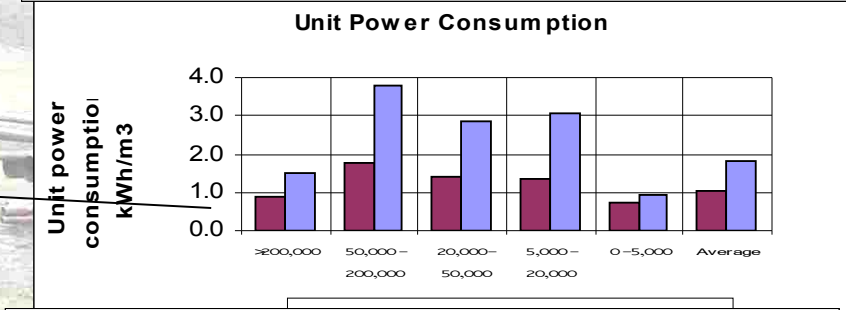
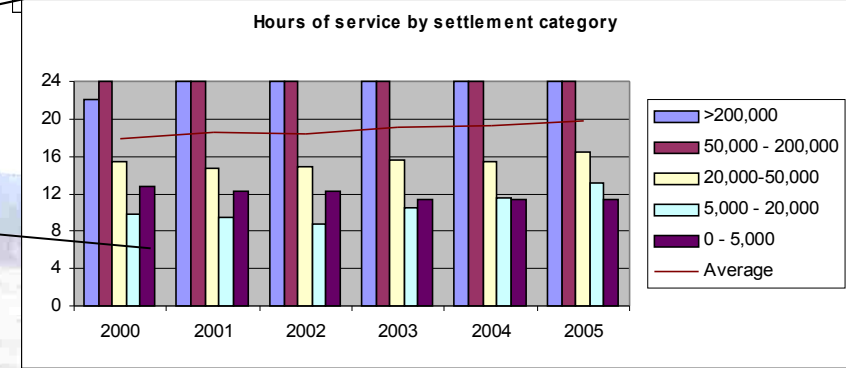
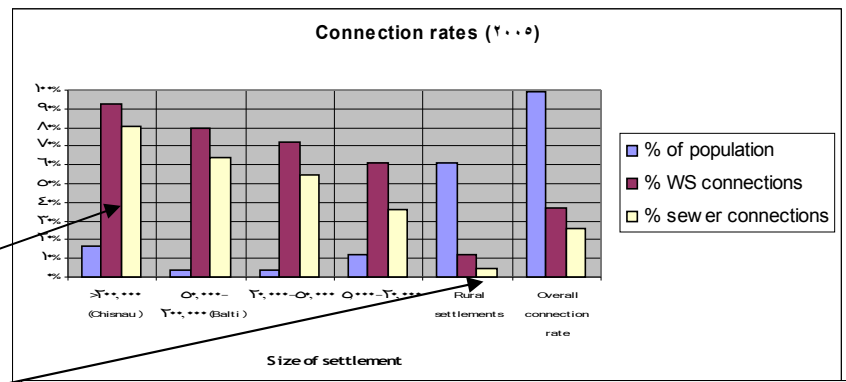
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# CURRENT SITUATION IN THE SECTOR

- High levels of urban connections  
(but poor quality of service outside major cities)
- Low levels of rural connections  
(but the majority (60%) of population live in rural areas)
- Poor reliability outside largest cities
- Low efficiency levels expressed by high power consumption compared to expected range
- Excessive pipe burst



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of 0.2 /km/year

# CONSTRAINTS TO DEVELOPMENT

Inadequate coverage and service level

Poor quality of service to consumers

Institutional delinquencies and high administrative overheads

Insufficient financial and managerial resources

High non-revenue component

Inefficient operation and maintenance

Poor monitoring and cost recovery

High investment needs and project costs

Over regulation of sector

Poor Metering



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# CURRENT FINANCIAL SITUATION

Required Expenditure  
**135 mln. USD/Year**

**Budget**  
12 mln USD/Year

**Technical Assistance**  
10,2 mln USD/Year

**GAP !!!**  
112,8 mln. USD/Year



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# DEVELOPMENT STRATEGY:

Scenario	Objectives	Main Sectors		Main Beneficiaries		Expend. over 20 years
		WS	WW	Rural	Urban	EUR
1) Baseline	Halt deterioration of existing infrastructure by improved O&M and reinvestment in old infrastructure	●	●		●	1,320 million
2) (1) + MDGs	Halve the population with no access to improved water and sanitation	●	●	●		1,820 million
3) (1) + EC Directives	Compliance with EC Water and Wastewater Directives		●		●	1,840 million
4) (1) + MDGs + critical WWTPs	As (2) (MDGs) plus providing wastewater treatment to critical towns discharging into international waters		●	●	●	1,910 million
5) (1) + MDGs + EC Directives	Combining both MDGs (mainly rural benefits) and EC Directives (mainly urban benefits)	●	●	●	●	2,340 million
6) Draft Gov't strategy	An estimate of total investment needs	●	●	●	●	3,240 million



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# FINANCIAL REQUIREMENTS TO STRATEGY IMPLEMENTATION

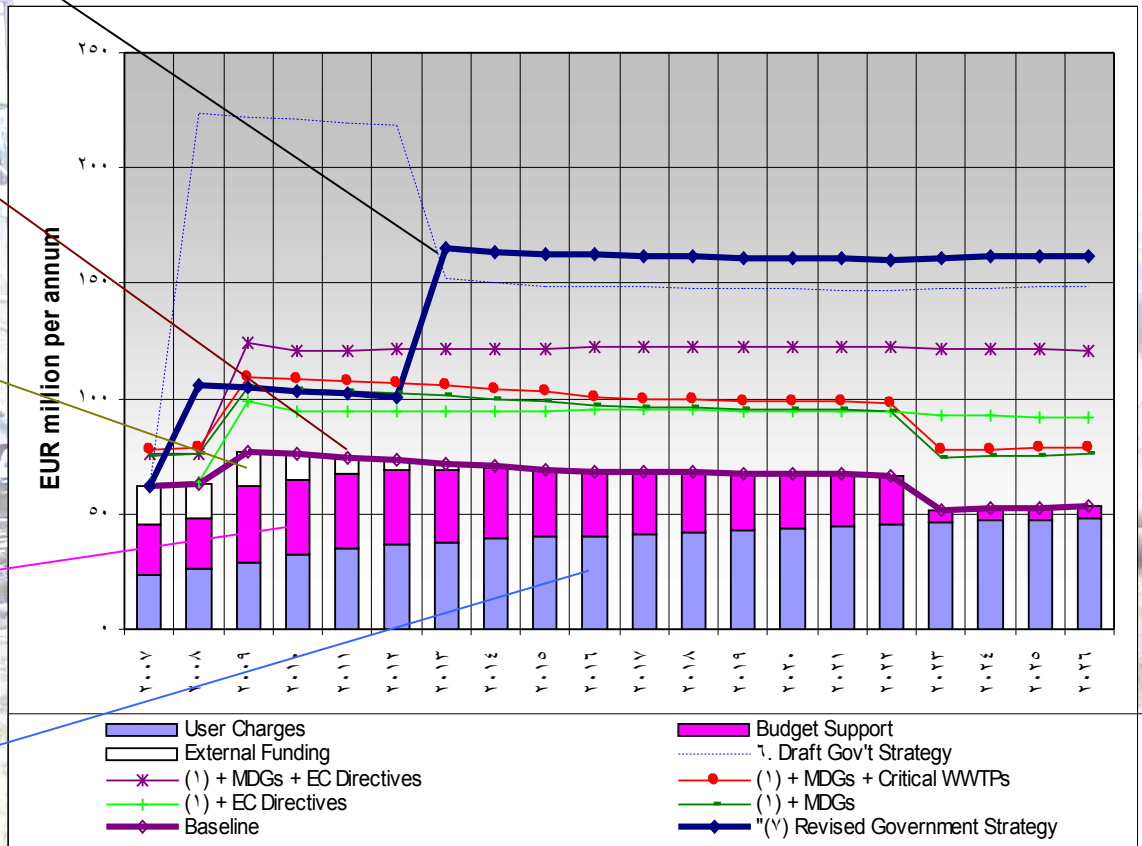
Higher cost strategies not realistic

Baseline scenario

External support increased from EUR 5 million per year to 17 million per year

Government support increased from 0.5% to 2.3% of national budget

User charges increased to 5% of household income



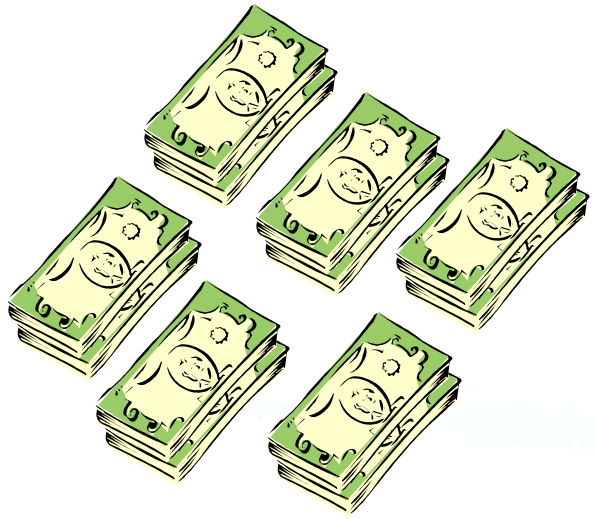
# INCREASED EMPHASIS ON PPP IN WATER INFRASTRUCTURE

Hence the imperative need for  
Private Sector Participation for:

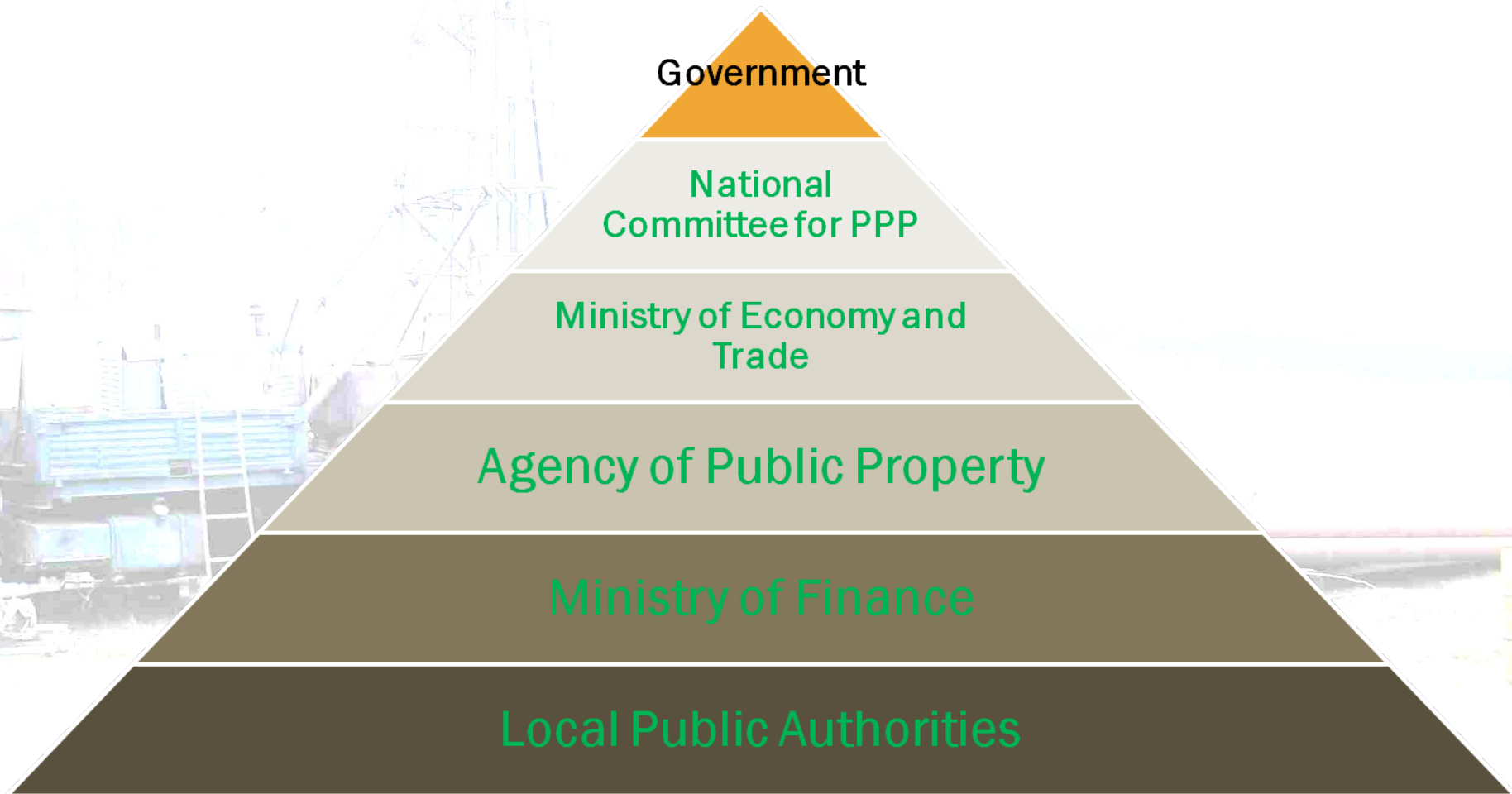
« EXTENDED RESOURCES

• STATE-OF-THE-ART  
TECHNOLOGIES

• EFFICIENT PROJECT  
MANAGEMENT / MAINTENANCE



# INSTITUTIONAL FRAMEWORK OF PPP IN MOLDOVA



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# FORMS OF PRIVATE SECTOR PARTICIPATION

- « service provision / fulfillment contract;
- « **fiduciary administration contract;**
- « renting / leasing contract;
- « **concession contract;**
- « memorandum of association;
- « **other forms which are not explicitly banned by law**



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# ROUTE TO PRIVATE SECTOR PARTICIPATION

« The concept of Public-Private Partnership is generally seen as one of these models:

- ¢ **Build-Operate-Transfer (BOT)**
- ¢ build -operation -renewal (BOR)
- ¢ build - transfer - operation (BTO)
- ¢ leasing -development -operation (LDO)
- ¢ rehabilitation -operation -transfer (ROT)
- ¢ other schemes which are not explicitly banned by law

« In Moldova full blown Private Sector Participation models have not been put into place, so far



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# PROCEDURE FOR PPP INITIATION

Public partner's identification of the PPP object

Carrying out feasibility study

Approbation of the feasibility study by the Agency

Public partner's development of the documentation necessary for the carrying out of the private partner selection competition

Public partner's appointment of the members for the private partner selection commission



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# PROCEDURE FOR PPP INITIATION

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graph TD; A[Publication in the Official Monitor of the Republic of Moldova of an informative memo regarding PPP selection competition] --> B[Publishing the integral content of required documentation on the Agency's web page]; B --> C[Receiving of bids and their examination]; C --> D[Taking the decision regarding the appointment of the private partner or regarding the rejection of all received bids.];
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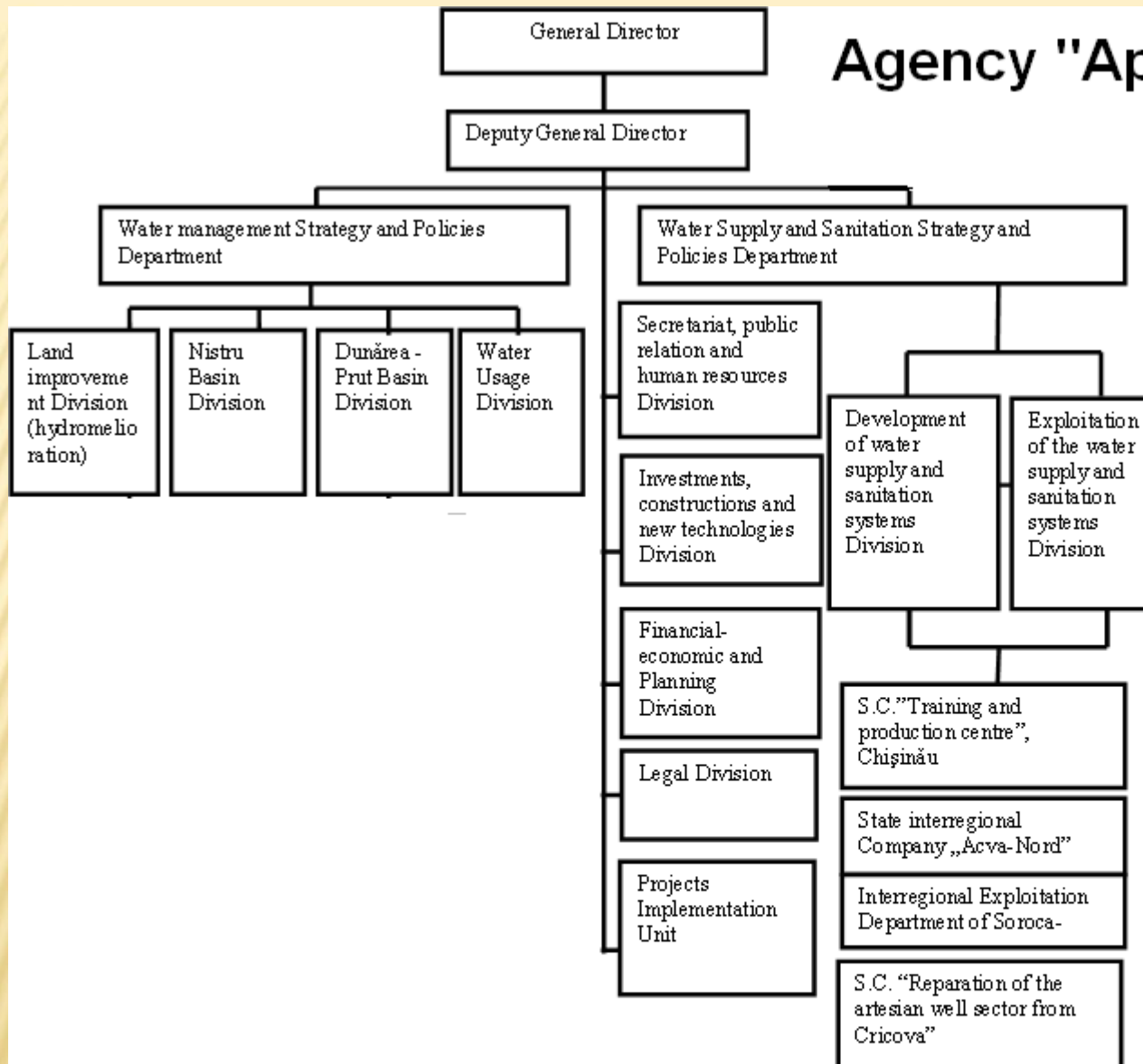
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# THANK YOU!



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