

# TISZA CASE STUDY – AGRICULTURE, UKRAINE



Vienna, October 2012

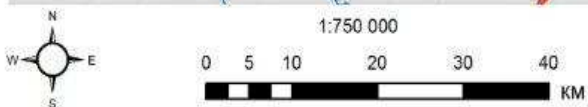
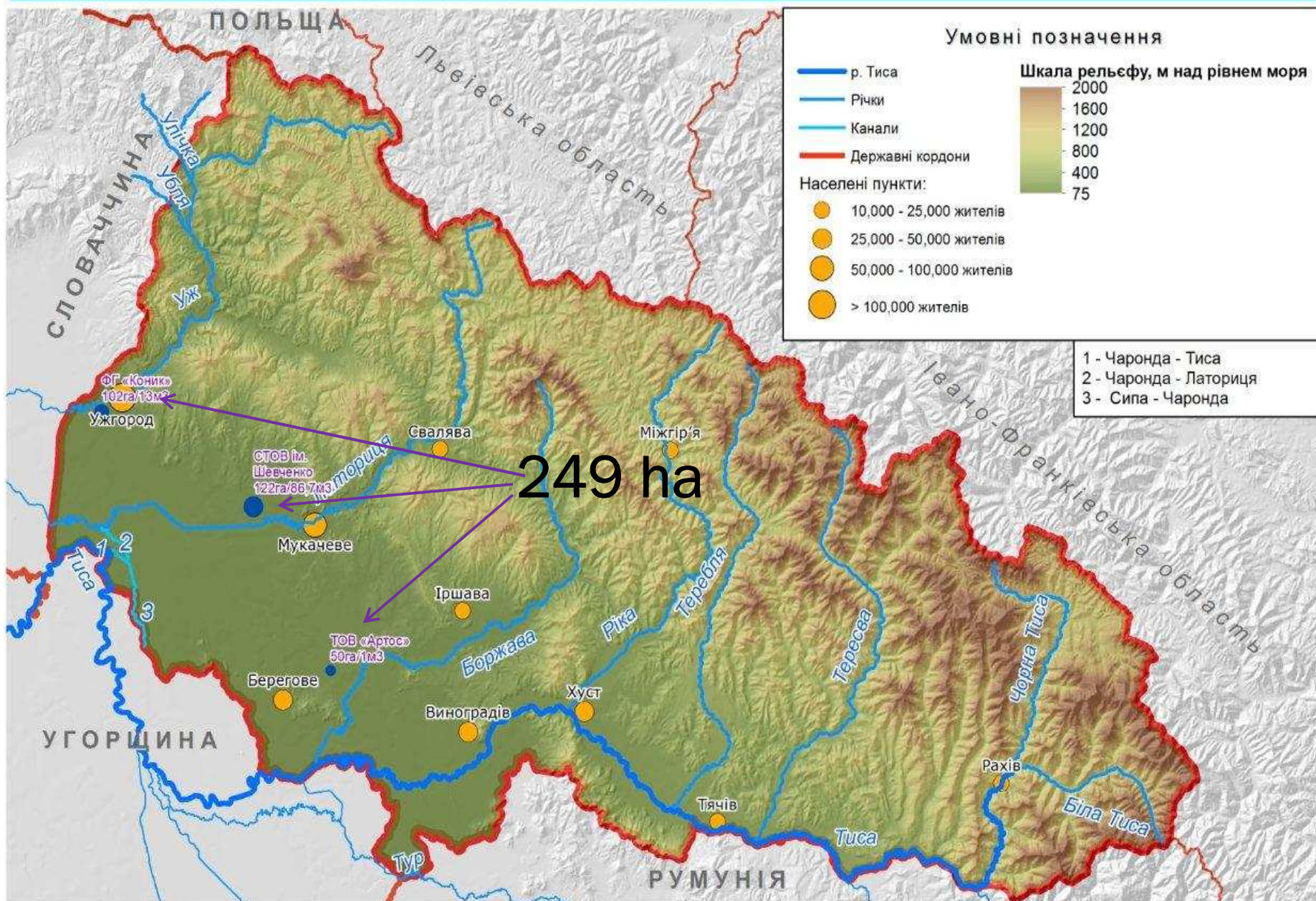
## UA PART OF TISZA BASIN



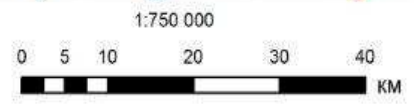
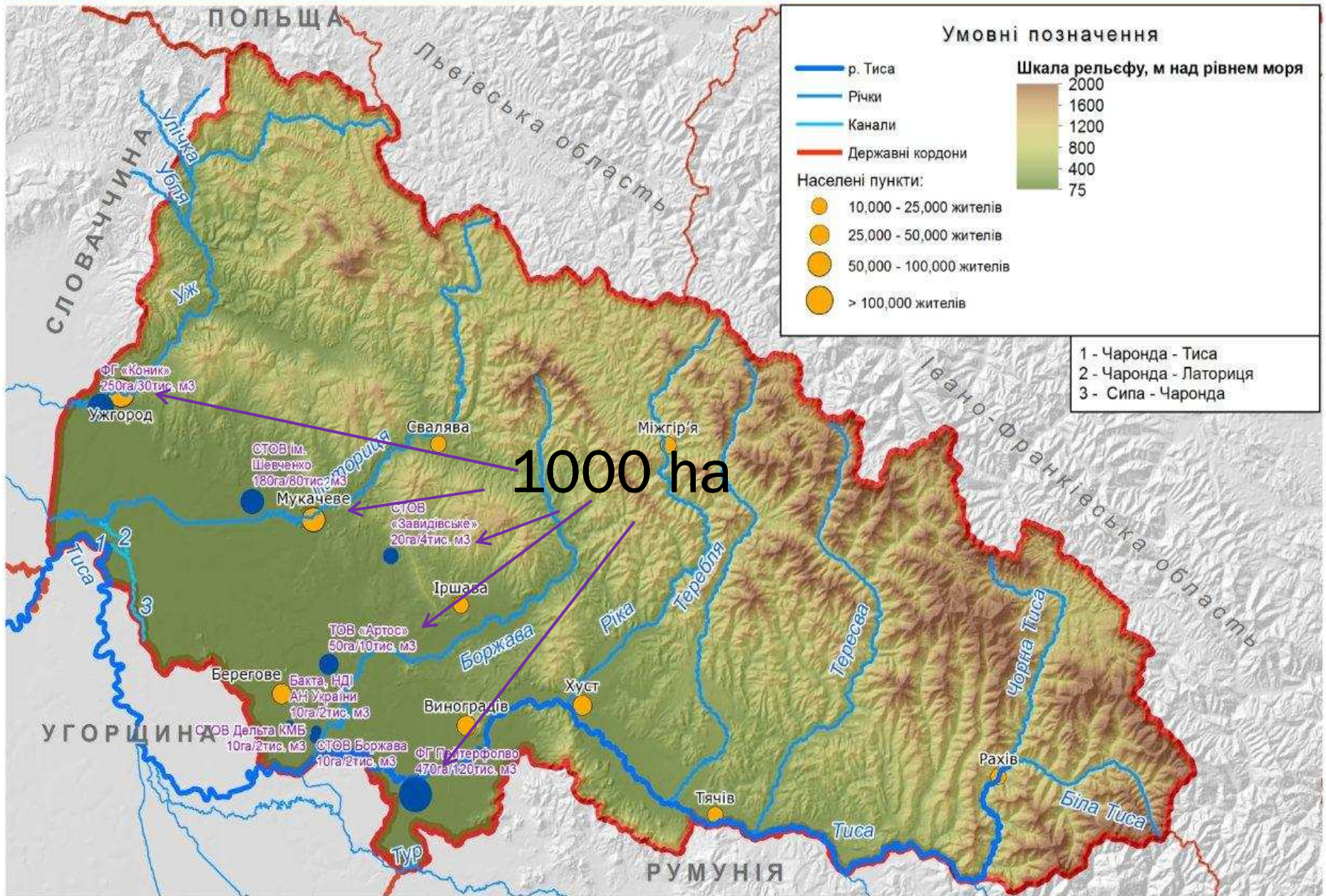
- ✘ Areas under irrigation system – **875 ha**
- ✘ Small area of irrigated lands (comparing to other Tisza countries) – **249 ha**
- ✘ Average water quantity annually used for irrigation in last 3 years per ha – **359 m<sup>3</sup>** per ha (mostly vegetables (450-700 m<sup>3</sup>) and potato (250-300 m<sup>3</sup>) are grown)



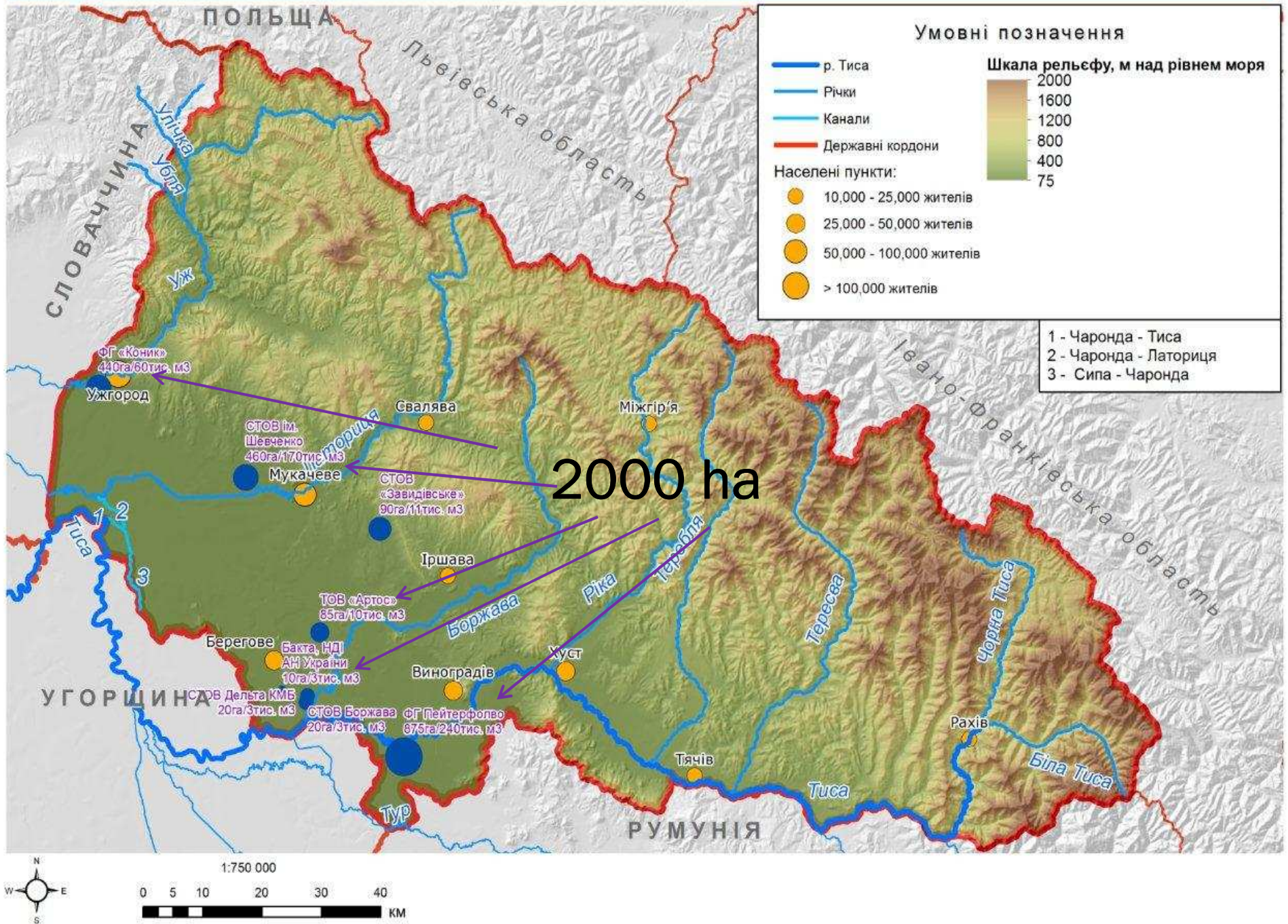














# TENDENCIES IN THE WATER USE FOR IRRIGATION

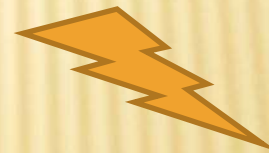


# WATER DEMAND - PROGNOSIS

- ✘ Total water quantities planned for irrigation ( $10^6 \text{ m}^3$ ) by the end of 2021

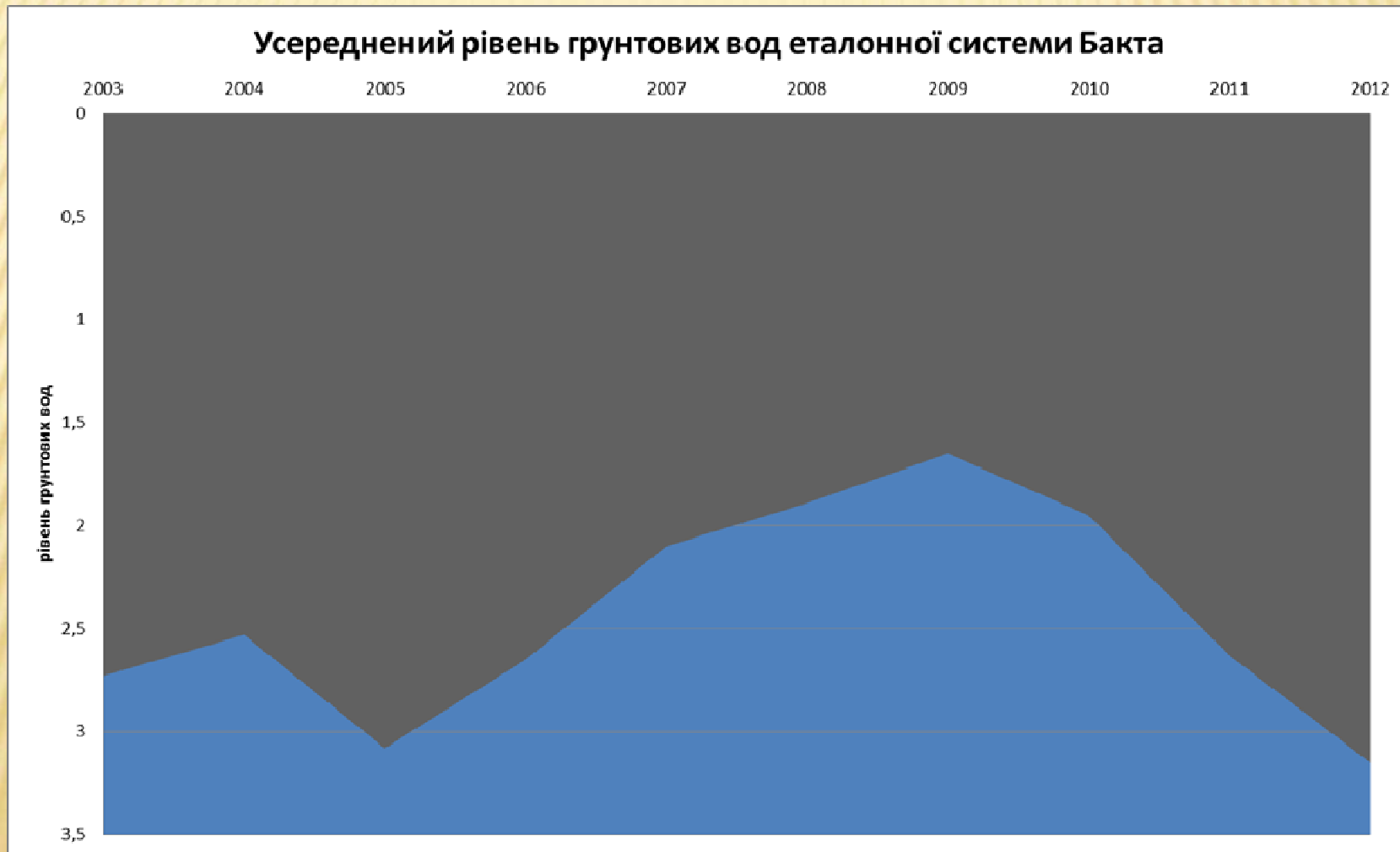
0.5 mln.  $\text{m}^3$

(2012 - 0,1 mln.  $\text{m}^3$ )



*Need to reconstruct amelioration system*

# TENDENCIES IN THE LEVEL OF GROUNDWATER





# CURRENT CONFLICTS BETWEEN WATER MANAGEMENT AND AGRICULTURE (1)

## ✘ Low priority of agricultural lands in flood protection

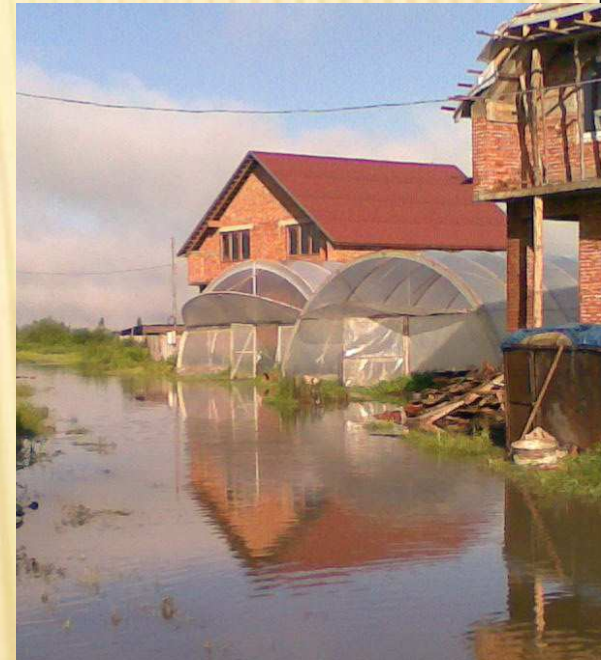
- ✘ During last years there is underfinancing of *Integrated Flood Protection in the Tisza basin in Zakarpatska Oblast*. In conditions of the limited funds the priority is given to protection of settlements, not agricultural lands

## ✘ Land for flood protection measures

- ✘ Local farmers do not agree to provide their land for flood protection activities. It is especially the case in lowland fertile parts of the oblast, where each piece of land is very valuable.

## ✘ Unsatisfactory state of melioration (drainage) system

- ✘ 5,408 km of channels should be cleaned. The total cost 30 mln Euro.





# CURRENT CONFLICTS BETWEEN WATER MANAGEMENT AND AGRICULTURE (2)

## ✘ Water protection stripes along the rivers

- ✘ Unfortunately looking for bigger harvests farmers often plough land up to river bank lines, which causes further soil erosion and nutrients washing out. Land for flood protection measures



## ✘ Illegal water in-take and wastewater discharge

- ✘ No proper WWT facilities to farmers, illegal direct discharges and in-takes in rivers





# WATER MANAGEMENT AND AGRICULTURE

Common interest



Flood management

200 thousands ha  
of agricultural lands  
need to be protected



# POSITIVE EXAMPLES OF COOPERATION

- ✘ No compensation schemes at national level
- ✘ Voluntary providing of agricultural lands for flood constructions after public consultations
- ✘ **Informative Advice Centre** on the basis of the Tisza River Basin Authority (Tisza BUVR) was established.  
[http://buvrtysa.gov.ua/advice\\_centre.html](http://buvrtysa.gov.ua/advice_centre.html)

The main tasks of the centre are as follows:

- ✘ to provide informational-consultation and advisory services regarding BAT in the field of water management and melioration of the lands for farmers, water managers and general population.
- ✘ To provide informative and consultative recommendations regarding the effective use of meliorated lands and establishment of the watering.
- ✘ Additional small informational centres are established in some rayon administrations (local level).



# CHANGES IN AGRICULTURAL PRACTICES TO ADAPT TO AVAILABLE WATER RESOURCES

2012 summer - critical minimal flow in Uzh and other Tisza tributaries

- ✘ Turn to less water consumption cultures

Vegetables



fruits



- ✘ Introduction of BAT  
improvement of irrigation efficiency  
drop irrigation



**THANK YOU FOR ATTENTION!**

