Environmental and economic aspects of water metering implementation (kharkiv region)

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Inconstant water supplying and rising of ground water level on considerable territories are actual question for the Kharkiv on last years.

Floating occupy area are near 10 000 hectares in Kharkiv. Considerable development of the process of floating acquires in steppe zone of Kharkiv region.

For reveal real volume water use of urban population from municipal centralize water supply system, social research was conducted in different district of Kharkiv and data of flat which arrange water metering was collected. Also have been calculated the number of people who are real live in flat and have a pet.

After research, calculation shows that a lot of surplus water in water supply system of Kharkiv and leads to the high level leakages run out and additional supply of underground water. Thus, as a result we have large float area.

All populations of Kharkiv (about 1.4 mln) get drink water from water supply system, but from water supply system run out more than 5 million square meters of water per month.

This quantity of water can replenish level of underground water, and can influence on condition of floated area.

Also was calculating financial losses of urban population that don't

use water metering, they pay for water they don't use, and they overpay more than in two-three times (results of the research in the table).

Table - Economic indexes of water use from municipal water supply system with water metering implementation (tariff 0,95 hrv/ m^3)

№	Water use period, months	Family respondents	Cost of water use according to water metering indicators, hrv.	Cost of water use according to normative, hrv.	Difference, Δhrv.
1.	21	2	7,5/3,75	21,1/10,55	-13,6/6,8
2.	6	4	14,24/3,56	42,2/10,55	-27,96/6,99
3.	18	4	8,92/2,23	42,2/10,55	-33,28/8,32
4.	54	4	4,84/1,21	42,2/10,55	-37,36/9,34
5.	28	3	4,1/1,37	31,65/10,55	-27,55/9,18
6.	36	4	6,92/1,73	42,2/10,55	-35,98/8,82
7.	24	3	6,27/2,09	31,65/10,55	-25,38/8,46
8.	18	4	9,76/2,44	42,2/10,55	-32,44/8,11
9.	29	5	19/3,8	52,75/10,55	-33,75/6,75
10.	16	3	7,74/2,58	31,65/10,55	-23,91/7,97