INCORPORATING OF TERRITORIAL - BRANCH FEATURES FOR WATER CONSUMPTION TARIFF POLICY

Aleksandr Matsenko

Sumy State University, Sumy, Ukraine

Existing specifications of payment for special use of fresh water resources take into account territorial features and provide branch differentiation of tariffs for consumption of fresh water from natural sources. But tariff policy for enterprises of different areas is based on nation-wide principles and is not connected to territorial peculiarities of regions.

For different territories factors which influence fresh water shortages and water tariff policy (fig. 1) will differ.

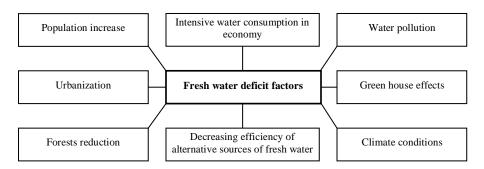


Figure 1 – Factors which should be taken into account for development fresh water tariff policy

Ukraine is insufficiently provided with water resources, and the problem of water provision for population in the nearest future will be very sharp. Two water pools Dneprovskiy and Volynsko-Podilskiy AB provide more than 61 % of prognosis resources and 47 % of operational stocks of fresh water potential. The basic prognosis resources of fresh water potential are placed in 6 areas. For southern and southeast regions with rather significantly urbanized territories, a droughty climate and absence of a sufficient wood cover water value will be greater, than for northern and western regions.

If to consider use and removal of freshen waters in Ukrainian economy that the greatest consumers are:

- electric power industry;
- housing and communal services;
- agriculture;
- iron and steel industry.

Considering economic specialization of regions, it is possible to draw to a conclusion, those southeast regions: Zaporozhye, Donetsk, Dnepropetrovsk, and Lugansk except climatic restrictions have the restriction, caused by rigid competition for fresh water between the most water-capacious areas: electric power industry, metallurgy, housing and communal services, chemical industries. The enterprises compete for the established norms of selection, for capacities of water supply systems and emissions in water sources. Thus, the price of water in conditions of modern market economy should take into account its deficiency caused both natural restrictions, and anthropogeneous loading.

Territorial-branch analysis of territory, concerning formation of water deficiency should be based on the systemic approach i.e. it must consist of estimation subsystems which have close functional links.

The system of tariffs for special use of fresh water resources should carry out distributive and nature protection functions through economic mechanisms. For fresh water tariff policy it is possible to apply the following methods offered by the author for enterprises of different areas which are on the territory of a certain region:

- "Resource value" method. It is offered to take a degree of importance of a resource as a basis of the given method for the enterprise. I.e. to learn a situation and to define what opportunities an enterprise has for water-saving or how far an enterprise can do without the part of water not given to it.
- "Stimulation of technological changes" method. To minimize water consumption by enterprises of water-capacious areas is possible due to realization of stimulation policy of introduction of law waste technologies, and recycling systems. For example, if an enterprise uses the modern technology which allows using per unit of produced goods an optimal amount of water, then tariffs for 1 m³ of water should be lower, than for enterprises which use out-of-date technologies.

The problem of use of fresh waters from underground sources by enterprises for the technological purposes is rather sharp today. It is known, that underground waters are less polluted than surface and represent a strategic stock of the country, as their period of self-purification is much greater than the period of surface waters reproduction. Therefore the tariff policy for enterprises which use waters from underground sources for the technological purposes should be more rigid.

The offered innovations will force enterprises to accept actions, concerning water-saving technologies involved in manufacture, for example to invest in law waste and cleaning technologies, i.e. the part of the profit will be economically convenient for directing the water-capacious enterprises on updating and replacement of water-purifying constructions and modernization and start water recycling. The effective system of tariff policy should have both direct and indirect influence on processes of the balanced production load on territory of our country.