

DECISION OF ECONOMIC-ECOLOGICAL PROBLEMS OF SASYK-LIMAN

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The problem of effective and complex using of Sasyk-liman is developed by experts Institute of market problem and Economic-ecological researchers of National Academy of Sciences since 70th years. Already at this stage us were offered as alternative natural approaches to use of estuary Sasyk, and to a question of maintenance of the south of Ukraine by high-quality fresh water. The reason of environmental problems Sasyk liman is connected to its branch in 1979 from Black sea and transformation to the water basin.

The complex of the problems connected to transformation Sasyk demands the complex approaches to their decision, found reflection in the Concept of steady development of Tatarbunarsky region. The irrigation of Sasyk water has led to intensive degradation 30000 ha of soil and to decrease in their fertility. Water of Sasyk is not in demand at agricultural consumers. In 1983-1984 fish efficiency of Sasyk has exceeded 30 kg /ha. However, in due course, because of weak water exchange and the big temperature of water in July - August the lake began to become covered by a continuous blanket of blue-green seaweed. Their decomposition creates toxic pollution of a reservoir.

Rehabilitation of Sasyk stands in the center of problems of an effective utilization of natural resources of Tatarbunarsky region and Ukrainian Danube region. The basic *essence of rehabilitation* of Sasyk *in returning to it the status of sea estuary* by its connection with the sea.

The most important factors of the decision of problem Sasyk:

1. Dangerous ecological situation:
 - Degradations of soil in a zone of an irrigation in connection with use of unsuitable water for Sasyk irrigation;
 - Unsatisfactory quality of fishes in Sasyk ;
 - Flooding, bogging Sasyk territories, abrasion of coast;
 - Pollution, flowering of unfitness for household using of Sasyk waters;
 - Pollution of available underground sources of drinking water supply;
 - Pollution of coastal water areas of the Black sea;
 - Formation of dangerous conditions for the population - a cholera, etc.
2. Unfitness or low efficiency of Sasyk in a fresh-water variant for the various economic purposes (an agriculture, recreations and ecological tourism, a fish facilities, household water use).
3. Economic situation in the country, deficiency of power resources, absence of financial resources for constant expenses for water exchange and operation of irrigating system.
4. The increased disease of local population.
5. Preferability of functioning of reservoirs in a natural condition:
 - Foreign experience of transformation of complex ecosystems, resulting{bringing} in negative economic - ecological consequences;
 - Higher attendance of sea coasts and higher economic and social effect from improvement on sea resorts;
 - Uncertainty of long-term management of fresh-water Sasyk.
6. Necessity of an optimum combination of interests of the state, stakeholders and local population, removal of social intensity.

Using of biological potential. Various populations of sea kinds of fishes and coastal wild animals can be one of significant sources of economic development of region:

- Restoration and protection of sea kinds of the supreme vegetation;
- Development sea aquaculture;
- Cultivation on farms of trade kinds of birds;
- The sanction of extraction of a fish only under licenses;
- Use of the income of sale of licenses for hunting and fishing for protection and studying of a variety of kinds;
- Creation new natural reserves.

Estuary Sasyk enters in the Ramsar-list of international wetlands (the Convention about wetlands having the international value is signed on February, 2, 1971, Ramsar, Iran).

Preservation of Sasyk-liman in a sea mode gives the basis on *development in this region of the international tourism, ecotourism.*

On the basis of complex scientific researches it is necessary to solve the problem on giving on the state level the status of sea estuary for liman Sasyk. It will create a basis for development and realizations of the Program of social and economic rehabilitation and development of ecological-economic system of Sasyk-liman. Such campaign includes work above the feasibility report on optimum disclosing of Sasyk and its uses in a mode of sea estuary in view of social, economically, ecologically interest and steady development of Ukrainian Danube Region.