



EXECUTIVE COMMITTEE OF THE INTERNATIONAL FUND FOR SAVING THE ARAL SEA

Water-energy research and dialogue within Central Asia

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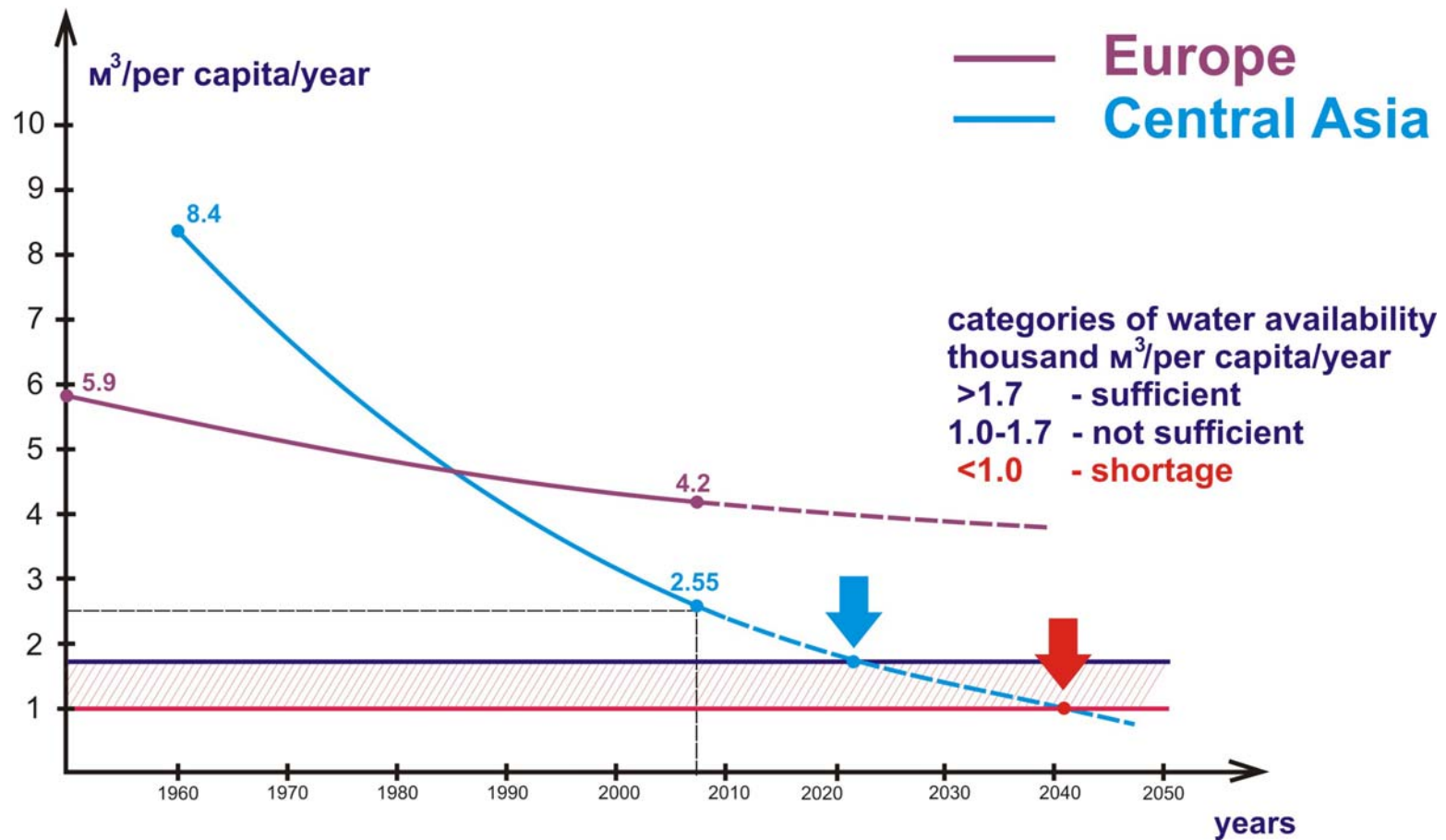
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Surface Water Resources of the Aral Sea basin (average annual, cubic meters per year)

Table 1

Country	River basin		Total in the Basin of the Aral Sea	
	Syrdarya	Amudarya	Cubic km	%
Kazakhstan	4.5	-	4.5	3.9
Kyrgyzstan	27.4	1.9	29.3	25.3
Tajikistan	1.1	62,9	64	55,4
Turkmenistan (including Iran)	-	2.78	2.78	2.4
Uzbekistan	4.14	4.7	8.84	7.6
Afghanistan	-	6.18	6.18	5.4
Total in the basin of the Aral Sea	37.14	78.46	115.6	100

Dynamics of water resources change per capita per year in the countries of Central Asia (m^3 /per capita/year)



Hydropower Potential of the Rivers in Central Asia

Table 2.

Country	Evaluated capacity of the Hydroelectric Stations, MW	Production of electro energy by the Hydroelectric Stations (20005), billion kW	Economic hydro potential, billion kW/year	Use of the hydro potential, %	Share in the hydro potential of the Central Asian republics, %
Tajikistan	4037	17.1	317	5	69
Kyrgyzstan	2910	14.0	99	14	22
Kazakhstan	2248	7.9	27	29	6
Uzbekistan	1420	6.0	15	49	3
Turkmenistan	1	0	2	0	0
Total	10616	45.0	460	10	100



Major objectives of water-energy regulation

- Ensuring rational and effective use of water-energy resources and equal access of the population of the Region to water resources;
- Protection and rehabilitation of natural water ecosystems and their potential to self regulation;
- Ensuing good quality of water resources with the purpose of improving health of the local population.



Objectives of the Water-Energy Regulation

- Development of the regional legislation on the base of international Conventions;
- Joining the Convention Framework on Environmental Protection for Sustainable Development in Central Asia, Ashgabat 2006, signature of the Agreement prepared earlier (in the area of security of dams in Central Asia);
- Further development and approval of water-energy concepts on efficient use of water-energy resources in the region of Central Asia;
- Development of integrated management of water resources (IMWR) of the river basins within the Third Program of the Aral Sea Basin (PASB-3).



Ways of solving issues of the water-energy regulation

- Improving quality of information by giving priority to the development of indicators for monitoring progress on achieving national objectives and international responsibilities;
- Ensuring free access to information on the conditions of water-energy resources and socio-economic situation using up-to-date technologies;
- Improving control on performance of obligations within Agreements on water-energy resources for fulfilling objectives of the Central Asian countries;
- Ensuring wide use of mathematical modeling and distance methods of research with the purpose of reducing amount of collected information and monitoring costs;
- Improving interstate coordination between responsible bodies, organizations and participants involved in information collection and exchange taking into view national and regional interests.



Expected outputs of the research and projects monitoring

1. Up to date research analysis on ecology, effective use of hydrotechnical constructions, security of dams, institutional management of water-energy systems, social development and other activities in the region of the Aral Sea basin;
2. Monitoring by the Executive Committee of the IFAS all projects within the Program of the Aral Sea basin (PASB);
3. Identification of possible mutually beneficial activities through adoption of the following recommendations on:
 - management of the systems, infrastructure and institutions;
 - regional initiatives on water-energy management;
 - protection of natural water bodies and improving technogenic systems of geographical formations featuring water for maintaining their holisticity and development of their water supply functions;
 - development of the early warning monitoring system;
 - hydropower stations exploitation, ensuring security of dams, and seismological assessment of risks;
 - integrated land improvement, combating desertification;
 - social development of the Region and conflicts prevention.