



EXECUTIVE COMMITTEE
OF THE INTERNATIONAL FUND
FOR SAVING THE ARAL SEA



Seventh EU–Central Asia High-Level Conference

SESSION 1: ENVIRONMENT, WATER AND CLIMATE CHANGE IN CENTRAL ASIA

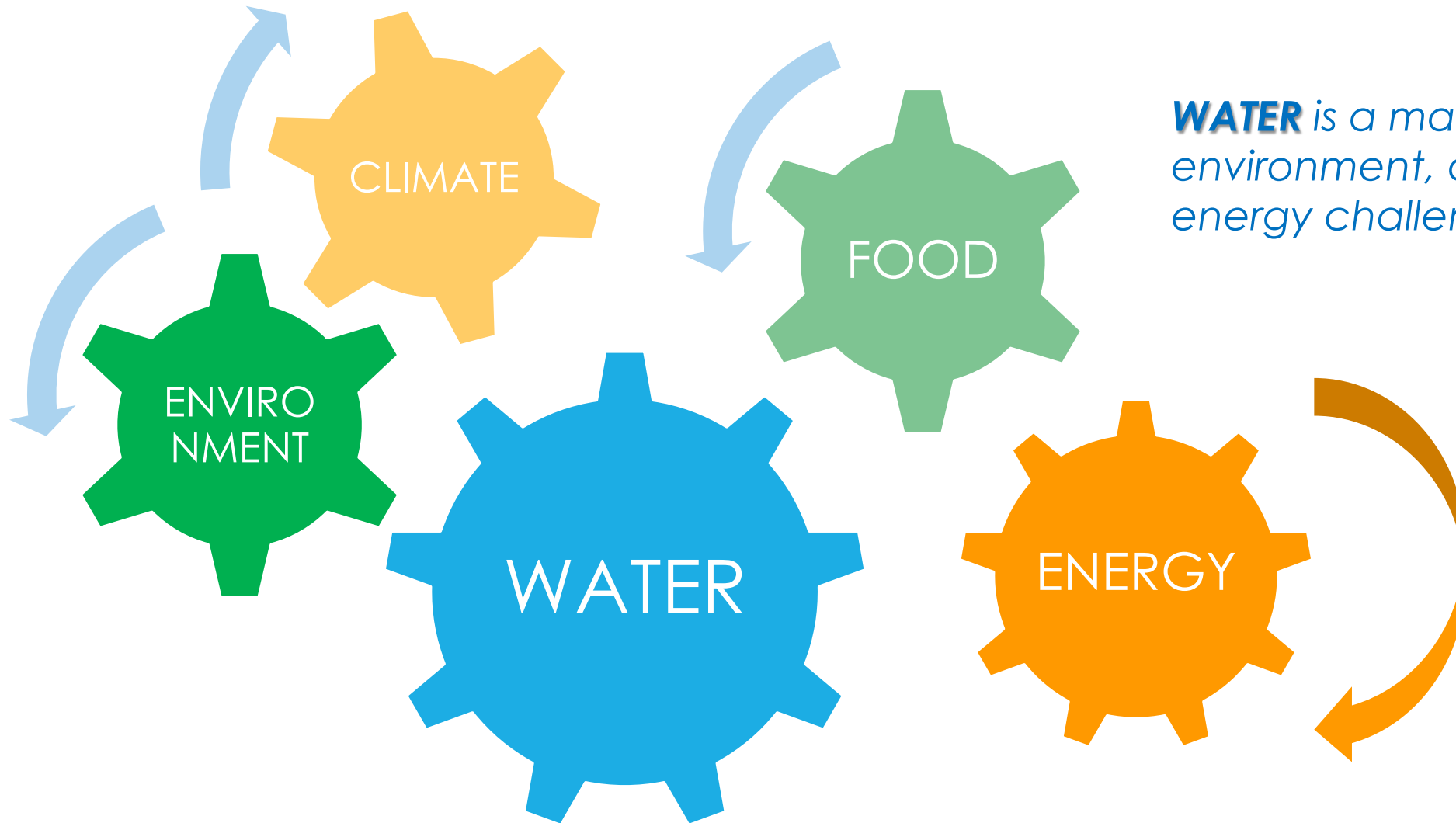
**“WATER RESOURCES AS THE MAIN DRIVER FOR ADDRESSING
ENVIRONMENT AND CLIMATE CHALLENGES”**

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INTERNATIONAL FUND FOR SAVING THE ARAL SEA

23 February 2023, Rome

WATER, ENVIRONMENT, CLIMATE nexus

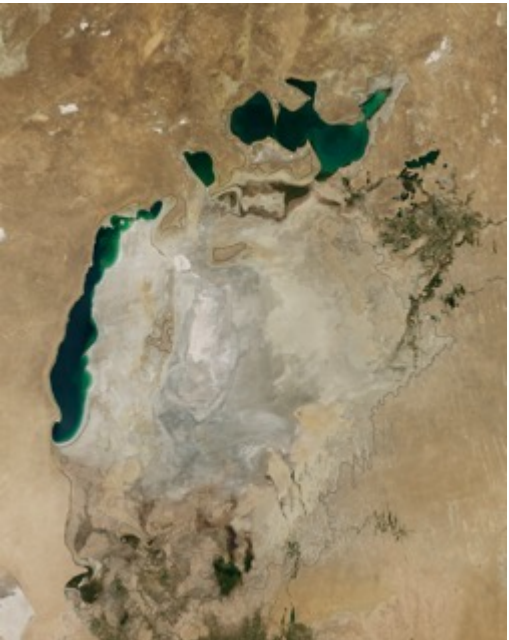
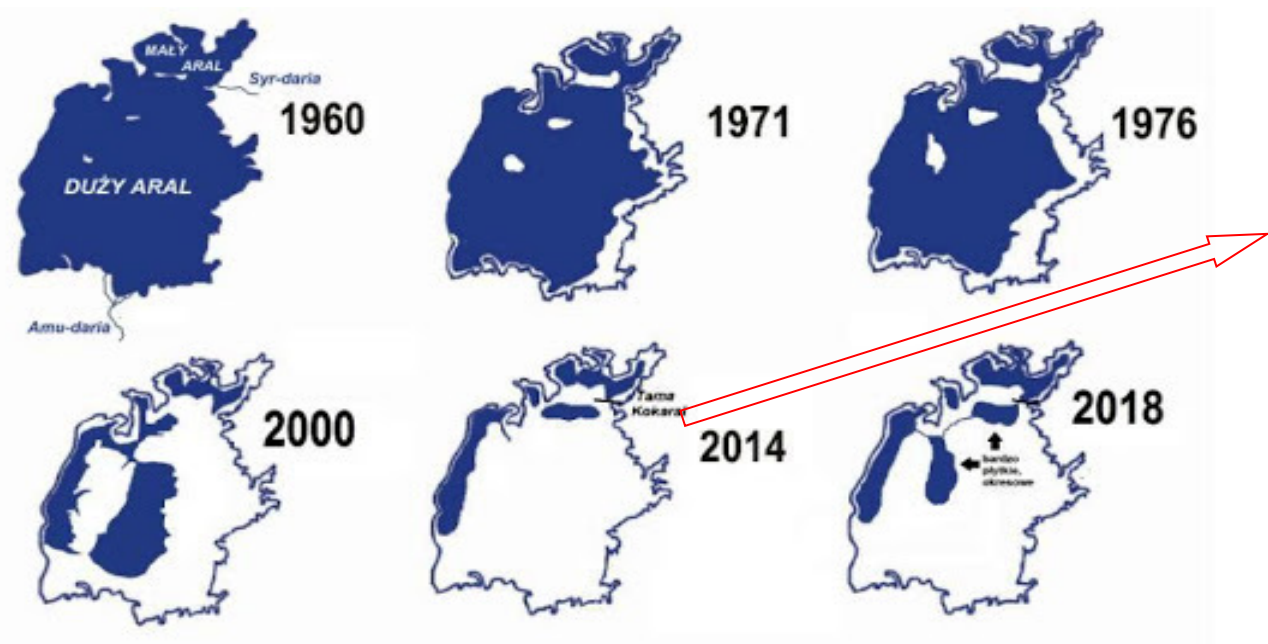


WATER is a main driver to address environment, climate, food and energy challenges in Central Asia

THE ARAL SEA CRISIS



the Aral Sea in 2014



Indicators	Units	Years		
		1960	1990	2018
Sea level	m	53,40	38.24	26,5
Water volume	km3	1083	323	69,31
Surface area	thous.km2	68,90	36,4	7,63
Salinity	g / l	9,90		170-60
Water inflow	km3/year	63	12.50	-3

REHABILITATION OF THE SMALL ARAL SEA



Preservation and restoration of a part of the Aral Sea, the Northern (Small) Aral Sea. Upon implementation of water management projects, the flows reaching the Northern Aral Sea increased from 350 m³/s to 700 m³/s, the area of the sea increased from 2,414 km² to 3,288 km², the volume of water increased from 15.6 km³ to 27.1 km³, water salinity decreased from 23 to 17 g/l.

Restoration of biodiversity of the Northern Aral Sea and the Aral Sea zone. Upon implementation of water and environmental measures the volume of fish catch increased from 0.4 to 8 thousand tons per annum. In addition, 8 natural reserves, 2 national natural parks, 1 state biosphere reserve, the Republican Center for Breeding Rare Species of Animals - Jayran were established and operate in the Aral Sea zone.



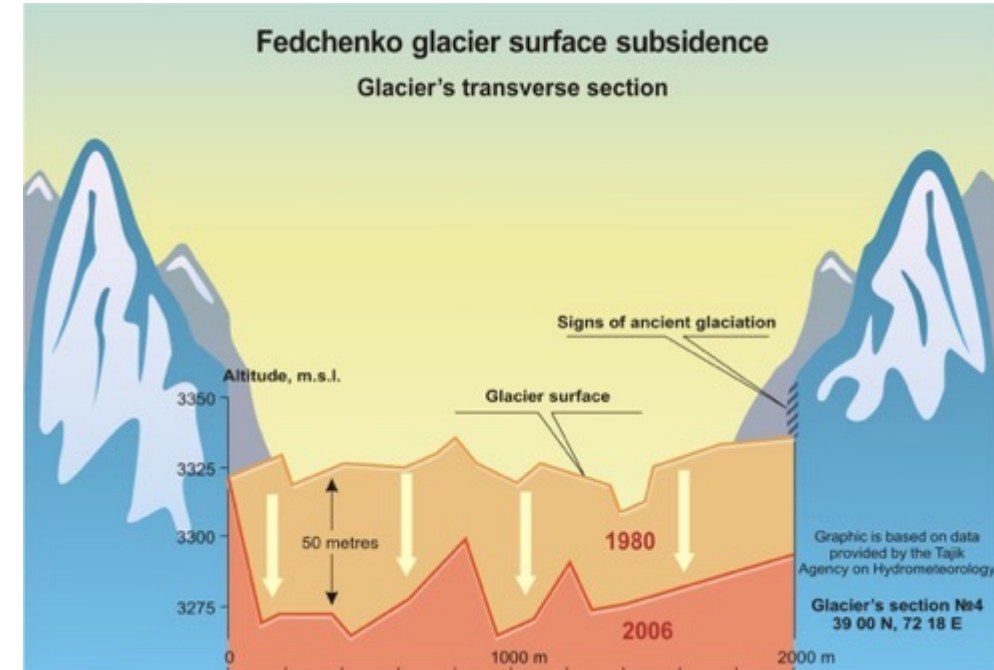
CLIMATE CHANGE IMPACT TO GLACIERS



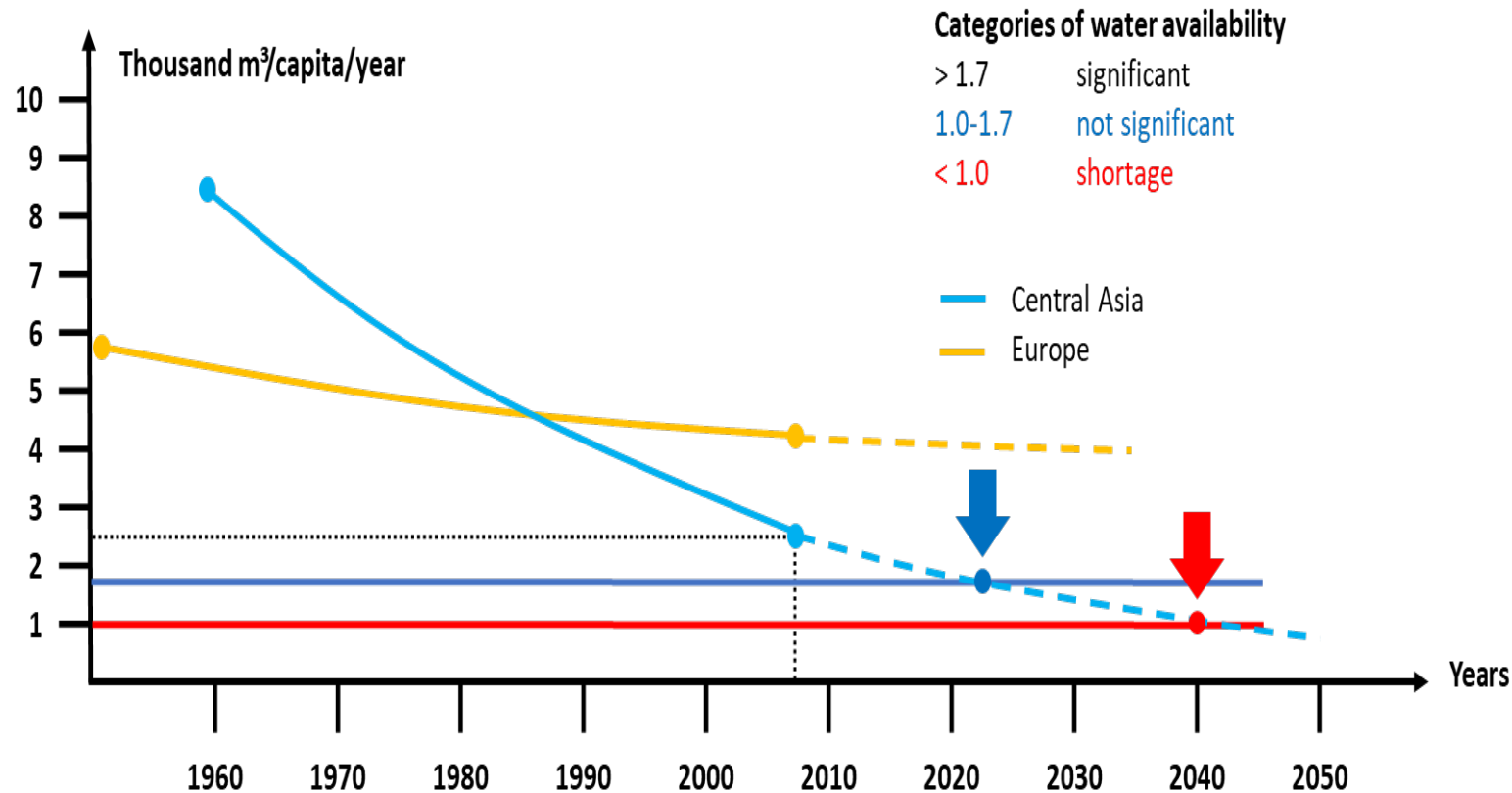
During the second half of the 20th century the glacial resources of Central Asia decreased by more than three times and continue to reduce with an average intensity of 0,6-0,8% per year in terms of surface and about 0,1% in volume.



Findings of glaciological surveys of 2006 revealed that the average rate of the retreat comprised 16 m/year. Generally, from the whole observation period (1933-2006), Fedchenko Glacier retreated by 1 km and lost more than 15 cub. km of its mass balance and 44km² of its area.



CLIMATE CHANGE IMPACT TO WATER RESOURCES



Runoff reduction – 1.41 km³ or 1.2% including 0.51 km³ in Amudarya and 0.9 km³ in Syr Darya (2001-2018)

“harsh” climate scenarios - the flow of the Syr Darya river can drop from 15% to 30%, and in the Amu Darya from 21% to 40%.

The milder scenarios, 6-10% for the Syr Darya and 10-15% for the Amu Darya by 2050.

Indeed, water and climate are very strongly interconnected. More than 80% of climate change impacts are happening through water. Melting of glaciers, hydrological cycles changes, floods and mudflows, draughts and other water-related challenges hurt us economically every year, undermining our efforts to achieve sustainable development.

WATER FOR ENERGY AND FOOD



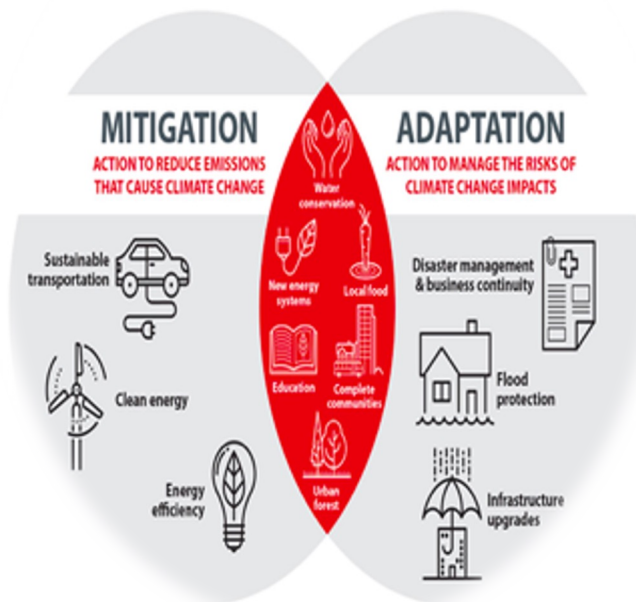
More than 80% of agricultural products, which are the main source of food security, are grown on irrigated agricultural land. In addition, more than 60% of the rural population of the region is provided with employment on more than 8 million hectares of irrigated land.

Countries	Total electricity generation, bln. kW.h	Power generation by HPP (2019)		Economic Hydropower capacity, bln. kW.h	Use of Hydro-power capacity, %	Share in Hydropower capacity of Central Asia %
		bln. kW.h	%			
Kazakhstan	106,03	9,98	9,4	27	36,9	5,36
Kyrgyzstan	15,05	13,82	91,8	142,50	9,70	28,3
Tajikistan	20,68	19,15	92,6	317	6,04	62,96
Turkmenistan	21,19	0,03	0,15	2	1,5	0,40
Uzbekistan	63,50	6,50	10,2	15	43,33	2,98
TOTAL	226,45	49,48	21,85	503,50	9,83	100

WATER FOR CLIMATE RESILIENCE



Building Climate Resilience



USING OF THE RENEWABLE SOURCES OF ENERGY, WHICH FITS TO THE CONCEPT OF “GREEN ECONOMY”

GENERATION OF THE AFFORDABLE AND ENVIRONMENTAL FRIENDLY ELECTRICITY

SAVING THE FUEL RESOURCES, WHICH ARE USING NOW INTENSIVELY FOR POWER GENERATION

REDUCING THE CARBON EMISSIONS

SUSTAINABLE MANAGEMENT OF WATER RESOURCES

ENSURING THE WATER SECURITY IN MIDTERM AND LONGTERM PERIOD

PROTECTION FROM FLOODS AND MUDFLOWS AND MITIGATION THE DROUGHTS

CENTRAL ASIA: CURRENT TENDENCY



Summit of the Heads of the Founding States of IFAS, August 24, 2018 in Turkmenbashi

The Presidents emphasized the need for further development and strengthening of relations of equal and mutually beneficial cooperation in the field of use and protection of interstate watercourses in the spirit of centuries-old friendship of peoples with deep historical roots, common culture, customs and traditions



Consultative meeting of the Heads of State of Central Asia, August 6, 2021 Turkmenbashi

Heads of State discussed various areas of development of regional cooperation, including trade and economic, investment and financial, transport and communications, water and energy, information and technology, environmental, cultural and humanitarian, and also expressed their readiness for interaction in the interests of ensuring peace, stability and security in the region.



Consultative Meeting of the Heads of States of Central Asia, July 21, 2022 Cholpon Ata

The Parties ..., advocated strengthening mutually beneficial multilateral cooperation between the countries of Central Asia on the integrated and rational use of water and energy resources in the region, taking into account the interests of all countries of the region.



REGIONAL COOPERATION AS A SOURCE OF STABILITY AND ECONOMICAL GROWTH

Benefits of regional cooperation. The countries of the region are largely interconnected by various infrastructures - water, energy, transport, etc. The **development of water cooperation** is a key tool for solving interstate issues related to water and environment. According to a recent report entitled “Rethinking Water in Central Asia”, better cooperation could generate an additional \$ 4.5 billion per year for the Central Asia region.

Restoring confidence. Changes in recent years in the political, economic, social, humanitarian and other spheres in the region have acquired positive dynamics, which create the necessary prerequisites for the further development of cooperation and restoration of trust.

Regional water security. The consequences of climate change, the growing demand for water resources associated with population growth and economic development, economic and financial difficulties and other regional challenges require intensified joint efforts and concerted action to achieve regional water security in the future.



IFAS REFORM as a TRIGGER



The EC IFAS in 2021

- resumed the activities of the WG to improve the organizational structure and legal framework of IFAS.

Attracted financial support and international consultants to facilitate its work.



IFAS board meeting, June 29, 2021, Dushanbe

- instructed to continue work on enhancing the activities of the WG to improve the organizational structure and legal framework of IFAS, attract financial support and international consultants to facilitate its work.

IFAS board meeting, November 28, 2022 in Dushanbe

The Progress Report on IFAS reform was endorsed by IFAS Board members.



ASBP-4: TRANSFORMATION OF COMMITMENTS INTO ACTION

PRIORITY AREAS

GOALS

SUSTAINABLE DEVELOPMENT GOALS

Goals and objectives





THANK YOU FOR YOUR ATTENTION!

