COOPERATION IN THE ARAL SEA

Dr Vadim Sokolov, Elena Tsay

23-25 May 2017
CENTRAL ASIA AND THE ARAL SEA BASIN

TOTAL BASIN AREA: 1,231,400 KM²

POPULATION: 66 mln
51 mln LIVE WITHIN THE BASIN

TWO MAIN RIVERS:
SYRDARYA (37.3 km³/year)
AMUDARYA (79 km³/year)

TOTAL SURFACE RUNOFF: 116 km³/year
ARAL SEA BASIN COULD BE OBSERVED AS AREA WHERE EXCESSIVE HUMAN PRESSURE RADICALLY DISTORTED ALL THE COMPONENTS OF THE ENVIRONMENT

1960

1973

August 2005

August 2014

Appeared new desert - Aralkum
LEVEL OF SALINITY

- increased by more than 13-25 times
- exceeds average salinity of the World ocean by 7-11 times

Level of water

53 m (1960) by 29 meters
24 m (2013)

Ocean 18-24 (g/l)
Aral Sea 120-280 (g/l)
SOCIO-ECONOMIC ASPECTS

HUMAN HEALTH PROBLEMS

DEGRADATION OF LOCAL ECONOMY AND LIVELIHOOD OPPORTUNITIES

LOST OF CULTURAL HERITAGE FOR LOCAL POPULATION

INCREASED ENVIRONMENTAL MIGRATION
1. Order of the USSR Ministry of Reclamation and Water Management on the establishment of basin administrations on inter-republican water allocation in Amudarya and Syrdarya (Water Management Administration «Amudarya» and «Syrdarya») (Moscow, August 1987)

2. Statement of the heads of water authorities of the Central Asian Republics and Kazakhstan (Tashkent, October 1991)

3. Agreement between the Republic of Kazakhstan, the Kyrgyz Republic, the Republic of Tajikistan, Turkmenistan, and the Republic of Uzbekistan on Cooperation in the Field of Joint Management of the Use and Conservation of Water Resources of Interstate Sources (Almaty, 18 February 1992)

4. Decision by the Heads of Central Asian Republics on the establishment of International Fund for Saving the Aral Sea (Tashkent, January 1993)

5. Agreement between the Republic of Kazakhstan, the Kyrgyz Republic, the Republic of Tajikistan, Turkmenistan, and the Republic of Uzbekistan on Joint Actions for Addressing the Problems of the Aral Sea and Its Coastal Area, Improving the Environment, and Ensuring the Social and Economic Development of the Aral Sea Region (Kzyl-Orda, March 1993)


8. Agreement between the Republic of Kazakhstan, the Kyrgyz Republic, the Republic of Tajikistan, Turkmenistan, and the Republic of Uzbekistan on the Status of International Fund for Saving the Aral Sea and Its Organizations (Tashkent, May 1997)

9. Agreement between the Republic of Kazakhstan, the Kyrgyz Republic, the Republic of Tajikistan, Turkmenistan, and the Republic of Uzbekistan on the Status of International Fund for Saving the Aral Sea and Its Organizations (Ashgabat, April 1999)

10. Dushanbe Declaration (Dushanbe, October 2002)

11. UN General Assembly Resolution on Observer status for the International Fund for Saving the Aral Sea in the General Assembly (December 2008)

MITIGATION PATHS AND EFFORTS

Aral Sea Basin Programmes: joint efforts of countries of Central Asia and international community to mitigation consequences of environmental catastrophe

Implemented Programs:

- ASBP-1 (1995-2001)
- ASBP-2 (2002-2010)
- ASBP-3 (2011-2015)
I. Creation of **improved living conditions** for the population in Aral Sea zone:
   - Provision of health care services
   - Drinking water
   - Social infrastructure and jobs

II. Improving **water management system** and water saving:
   - Developing of coordinated mechanisms for management and protection of water resources in Aral Sea region
   - Implementation of IWRM principles in river basin
MITIGATION PATHS AND EFFORTS

III. **Afforestation** of Aral Sea dried bed and fighting desertification

IV. Protection of **bio-diversity**, rehabilitation of **environmental resources**: flora, fauna and special protected zones in Aral Sea zone, management of wetlands

V. Further improvement of **institutional basis of cooperation** in Aral Sea region under auspices of IFAS
EFFORTS ON IMPROVING SITUATION IN ARAL SEA REGION

**Institutional measures:**
- Regional institutions were set up: ICWC, IFAS, ICSD and CAREC
- Agreement on cooperation in Aral Sea Basin, Ashgabat
- Declaration, Nukus and Kyzylorda declarations: political will and support
- Aral Sea Basin programmes 1, 2 and 3

**Technical and technological measures:**
- Restoration and protection of delta lakes (Uzbekistan)
- Northern Aral Sea recovery (Kazakhstan)
- Afforestation of dried bed of the lake
EFFORTS ON IMPROVING SITUATION IN ARAL SEA REGION

Measures to support population (Socio-economic):
- Access to drinking water
- Improving infrastructure
- Credit provision for creation of local jobs
- Small scale initiatives
- New infrastructure (schools, roads, etc.)
ARAL SEA: GLOBAL SUPPORT

«... one of the most serious environmental disasters in the world...»
«...collective responsibility of the whole world, not only the countries of Central Asia...»

H.E. Ban Ki-moon

April, 2010, the Aral Sea
NEEDS FOR JOINT EFFORTS AND EXTERNAL SUPPORT

Basic provisions are available in the following areas (but region needs external support):

1. Maintain existing the fragile ecological balance in the Aral sea region, and combat desertification, aiming improvement of the water management system, economical and rational use of water resources;

2. Create conditions for reproduction and genetic conservation, and public health in the Aral sea region, development of social infrastructure; a wide network of medical and educational institutions;

3. Create the necessary social and economic mechanisms and incentives to improve the quality and standard of living of the population, the development of basic infrastructure and communications;

4. Preservation and restoration of biodiversity of flora and fauna in the region;

5. Further institutional reinforcement and strengthening of cooperation between countries in the region, in the framework of the International Fund for Saving the Aral Sea, and stepped-up efforts to alert the international community to the Aral Sea catastrophe.
GWP CACENA VIA ITS KEY PARTNERS IS ABLE TO CONDUCT FOUR DIRECTIONS WITHIN THE WATER DIPLOMACY PROGRAM:
Knowledge providers and consumers

- Policy & decision makers
- Practitioners from water, land, energy, environment, climate change fields
- Regional organisations (IFAS, ICWC, ICSD, CAREC, etc.)
- Expert communities, academia, educational institutions, students
- International organisations & development partners
- NGO, other public
- Case study prepared by Dr. Vadim Sokolov (Regional Coordinator GWP CACENA) and Dr. Dinara Ziganshina (Deputy Director SIC ICWC)
THANK YOU

vadim_sokol@mail.ru
e.tsay@unesco.org