

# SHARING OF EXPERIENCES ON WATER GOVERNANCE IN THE CONTEXT OF DISASTER RISK REDUCTION IN THE CHU-TALAS BASIN

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Commission of the Republic of Kazakhstan and the Kyrgyz Republic on the Use of Water Management  
Facilities of Intergovernmental Status on the Rivers Chu and Talas



## GENERAL INFORMATION ON THE CHU AND TALAS

### Chu basin

- ✘ The catchment area - 38 400 km<sup>2</sup> (Large Arna)
- ✘ The length of the river - 1186 km
- ✘ Power supply - snow-glacier
- ✘ Water resources - 6.64 km<sup>3</sup>
- ✘ Irrigated areas - 476.0 t.ga:  
Kazakhstan - 114,7- 24%  
Kyrgyzstan - 361,3-76%
- ✘ Population - 2 095 th.

### Talas basin

- ✘ The catchment area - 52 700 km<sup>2</sup>
- ✘ The length of the river - 661 km
- ✘ Power supply - snow-glacier
- ✘ Water resources - 1.74 km<sup>3</sup>
- ✘ Irrigated areas - 162.7 t.ga:  
Kazakhstan - 60.0 - 37%  
Kyrgyzstan - 102.7-63%
- ✘ Population - 686.3 th.





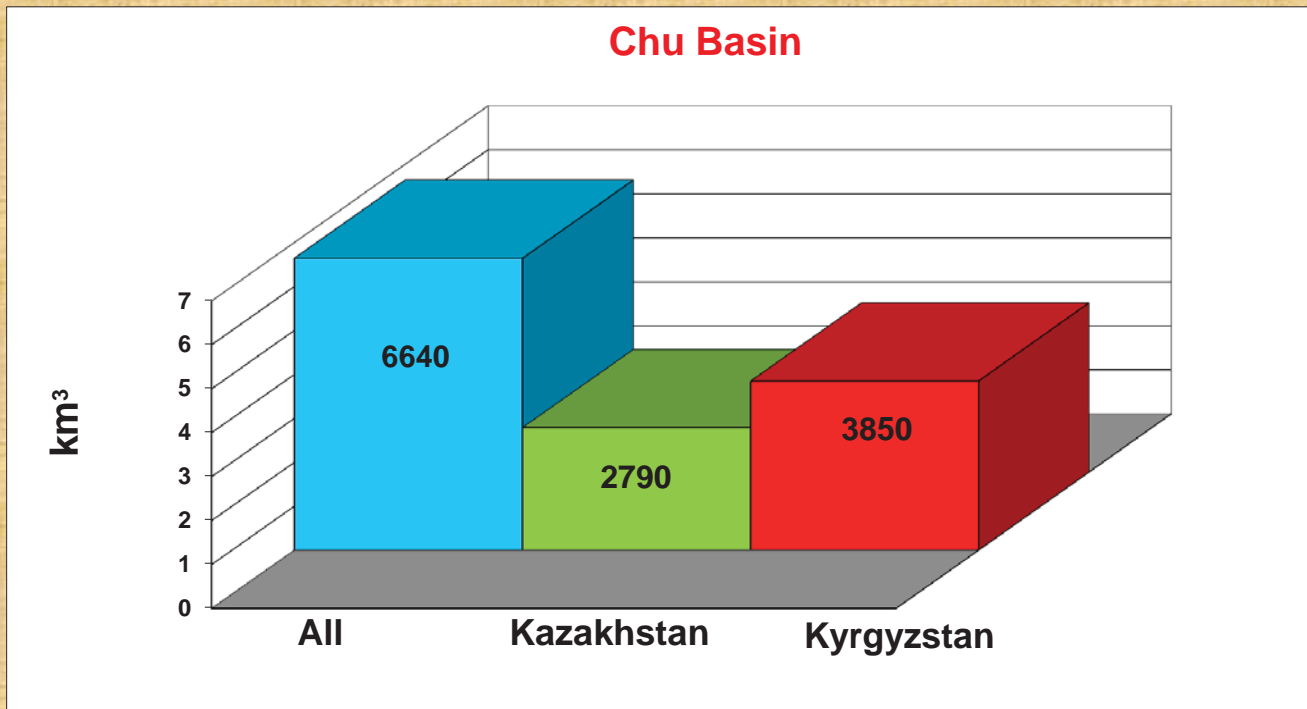
## STEPS TO ENSURE STABILITY IN USE WATER RESOURCES OF CHU AND TALAS

- ❖ 1996 - decision-making by water management authorities in Kazakhstan and Kyrgyzstan on the joint solution of water problems,
- ❖ 2000, Jan. 21, Astana - the signing of the Intergovernmental “Agreement on the Use of Water Management Facilities of Intergovernmental Status on the Chu and Talas Rivers”,
- ❖ August 2004 - the establishment of the Commission,
- ❖ May 2011, Bishkek - an International Conference to commemorate a decade of a bilateral “Agreement”.

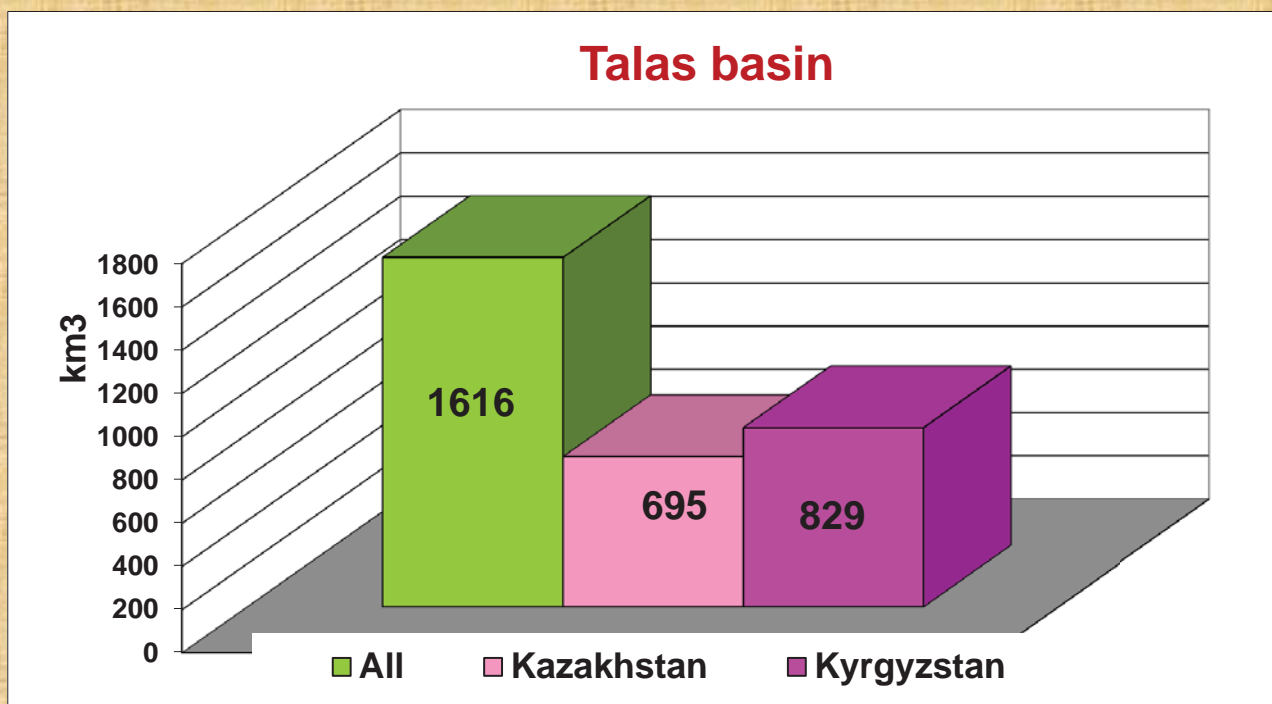




**WATER ALLOCATION BETWEEN THE REPUBLIC OF KAZAKHSTAN AND THE KYRGYZ REPUBLIC ON THE RIVER BASINS OF CHU AND TALAS IN ACCORDANCE WITH THE AGREEMENTS:  
"THE STATE OF THE DIVISION OF FLOW IN THE CHU BASIN "  
FROM 24.02.1983, AND PROTOCOL FROM 18.02.1985**



**WATER ALLOCATION BETWEEN THE REPUBLIC OF KAZAKHSTAN AND THE KYRGYZ REPUBLIC ON THE RIVER BASINS OF CHU AND TALAS IN ACCORDANCE WITH THE AGREEMENTS:  
"THE STATE OF THE DIVISION OF TALAS RIVER FLOW "FROM 31.01.1983, AND  
ADDITIONAL PROTOCOL FROM 18.07.1983, (ALMA-ATA)**







## KYRGYZSTAN AND GLOBAL CLIMATE WARMING

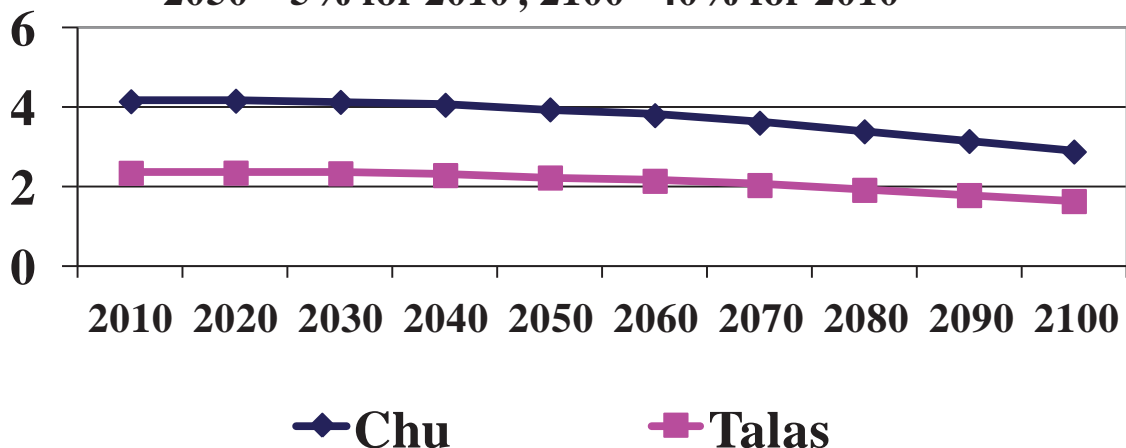
- ❖ Kyrgyzstan, as well as the entire International Community, is exposed to the threat posed by global climate change,
- ❖ Kyrgyzstan joined a number of conventions, including the UN Framework Convention on Climate Change and the Kyoto Protocol,
- ❖ Currently we develop a National Action Plan on climate change adaptation.



## KYRGYZSTAN AND GLOBAL CLIMATE WARMING

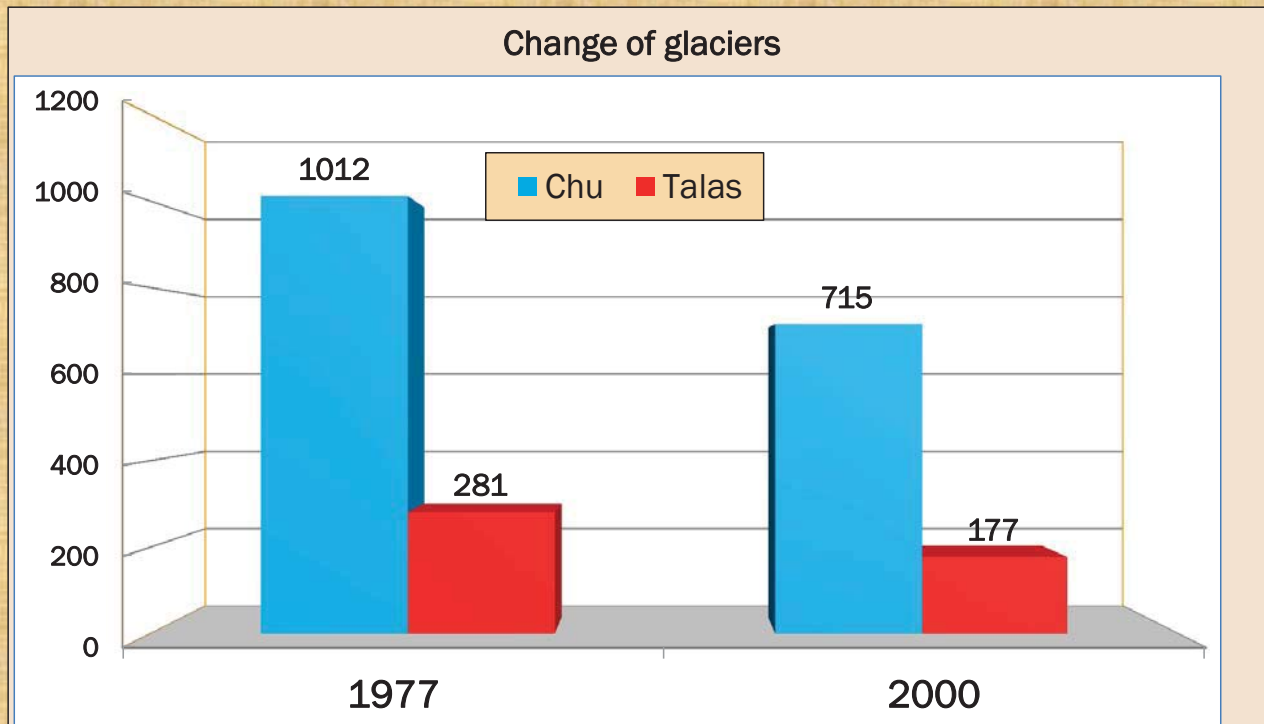
### Forecast changes in river flow, variant $\Delta = +1.5^\circ\text{C}$ at $m=0.9$

2050 - 5% for 2010, 2100 - 40% for 2010

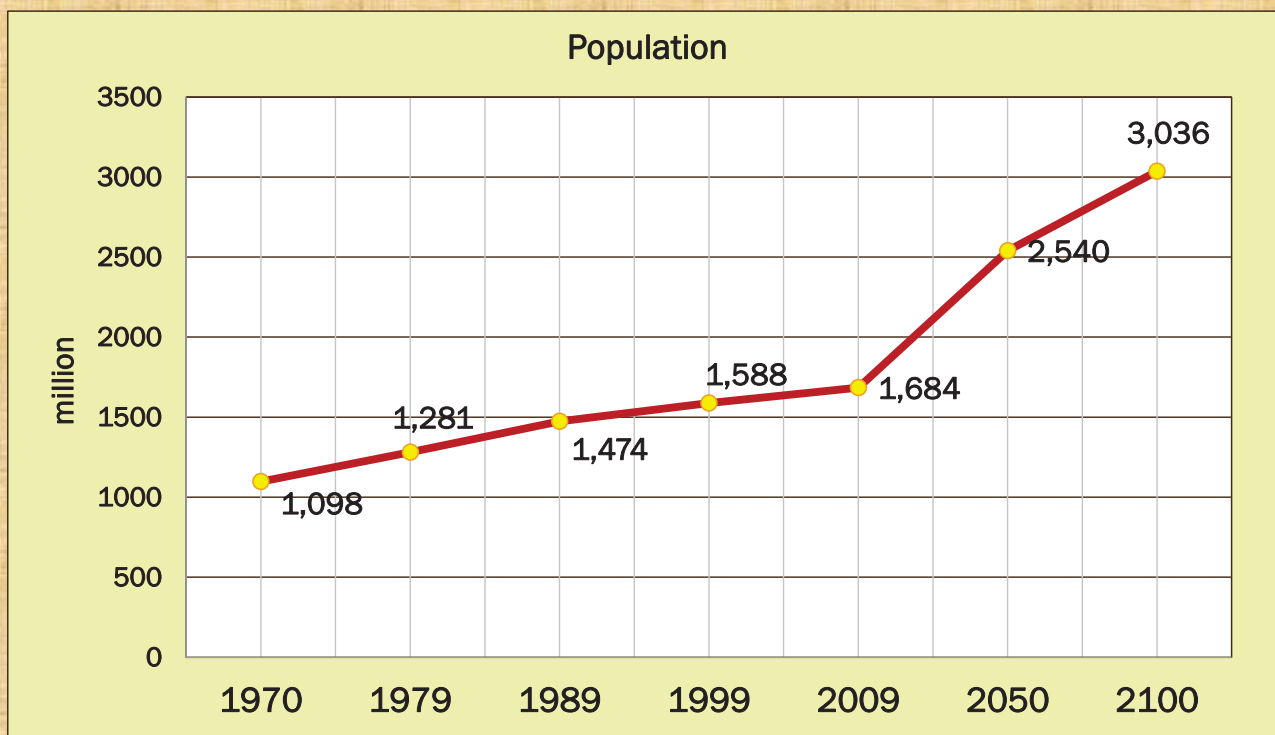




## DYNAMICS OF CHANGE IN THE NUMBER OF GLACIERS



## DYNAMICS OF POPULATION CHANGE IN THE CHU BASIN





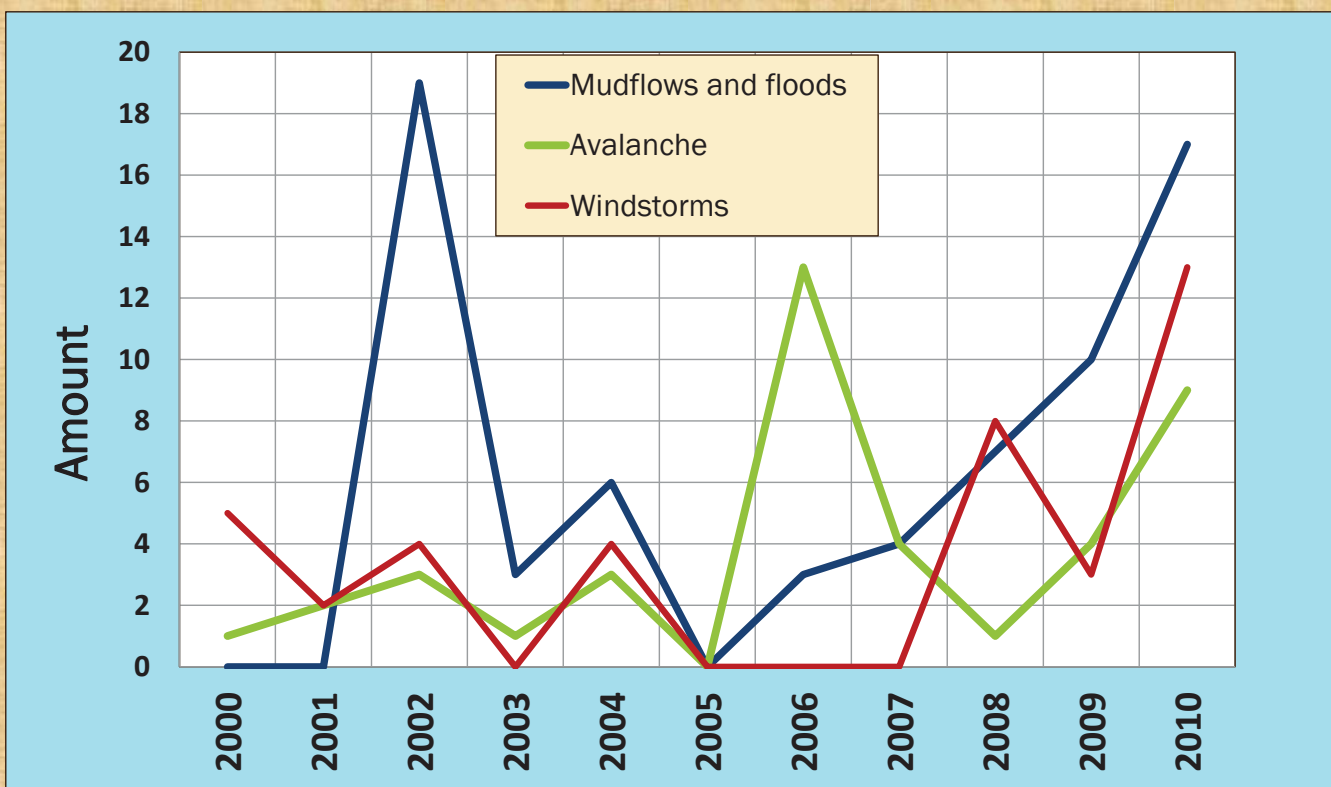
In Kyrgyzstan the most damage bring:

- ✘ Mudflows and floods
- ✘ Breakthrough alpine lakes
- ✘ Landslides
- ✘ Avalanches
- ✘ Rain showers
- ✘ The meteorological events,

These data have been developed in the framework of the regional project of the ECE UNDP "Promoting IWRM and Fostering Transboundary Dialogue in Central Asia" Component "Preparation of proposals for a national strategy for adaptation to climate change"



## EMERGENCIES IN CHU-TALAS BASIN







## GROWTH IN THE NUMBER OF EMERGENCIES IN CHU-TALAS BASIN (%) WHEN THE TEMPERATURE RISES BY 1 DEGREE C

	Chu basin	Talas basin
Mudflows and floods	9,23	3,40
Avalanches	7,14	n.e.d.
Windstorms	4,91	2,48
Under flooding	n.e.d.	n.e.d.
Rain showers	-0,45	0,91
Landslides	-4,31	n.e.d.
Hail	n.e.d.	n.e.d.
Snowfall	n.e.d.	n.e.d.



## NECESSARY ACTIVITIES JOINT MANAGEMENT OF WATER RESOURCES OF THE RIVERS CHU AND TALAS FOR DISASTER RISK REDUCTION

- ✘ **Coordination the objectives and principles** of management of reservoirs and hydropower plants between energy, water managers and environmentalists,
- ✘ emergency management, especially under **extreme conditions** water shortages and flooding,
- ✘ **investments** in measures to reduce the effects of disasters,
- ✘ implementation of **water quality standards** and water quality **monitoring** mechanism,
- ✘ improve the availability and quality of **electronic information** for the development of activities for disaster risk reduction,
- ✘ **World experience** of water management on transboundary rivers - Russia, Europe, America and others.



***THANK YOU FOR YOUR  
ATTENTION!***

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