Basins Chu and Talas rivers are located within the northern Tian Shan mountains and the eastern margin of the Turan lowland. In the administrative division of the mountain basin belongs to the Kyrgyz Republic, plain - to the Republic of Kazakhstan. Formation of the flow of the rivers performed entirely within the territory of the Kyrgyz Republic.
Emergencies in the Kazakh part of the basin

The territory of Kazakhstan is located in the middle and lower reaches of the rivers and the most susceptible to the harmful effects of water.

- Prior to the construction in 1975 of the Kirov reservoir on the Talas River were the annual floods, causing significant damage to objects in the area. In this part of the basin are 4 large dams, 17 bridges.
- After the flood there was one in 2002 called the emergency situation.
- On the other hand, regulation of the river bed Talas Kirov reservoir leads to lower groundwater levels, causing ecosystem degradation and desertification in the lower reaches of the river.

Drought

- An increasing shortage of water (drought in irrigated areas) and the degradation of aquatic ecosystems associated with the depletion and pollution of water. Because of the lack of environmental flows of water in the lower reaches of the Chu and Talas rivers are irreversible processes associated with the progression of desertification, namely degradation of the lower reaches of the river Talas, drying natural lakes, grasslands, extinction of many species of flora and fauna. In settlements decreased levels of groundwater used for drinking purposes.

State of the environment in the middle and lower zones
Chu and Talas Rivers

- According to estimates of experts, the basin will progress the process of reducing the overall moisture area. The increase of evaporation from the water surface of 300 mm or more. Natural water situation escalates.
Steps to ensure stability in use Transboundary water resources

- The establishment in 2006 Chu - Talas Commission (the Commission).
- Agreement signed on January 21, 2000 in the city of Astana

The Commission is guided by:
- Provisions on waste water allocation Chu and Talas rivers by 1983.
  Talas River 50% / 50%, the Chu River - 48% in Kazakhstan and Kyrgyzstan, 52%;
- Recommendations for equity financing of water facilities of interstate use.
  Kazakhstan's participation in equity financing from 2004-2014 totaled 4.0 mil. $ US.

The Commission internet address is www.chutalas-commission.org.

- Basin Water Council
- For the Kazakh part of the basins formed a single Shu-Talas Basin Council for the two rivers
- In the Kyrgyz part of the set up separate boards Chui and Talas
- All three national basin councils have matching status of a consultative body. The National basin councils composed of members the Commission
- There is an integrated approach to water resources management as a whole basin (at the international level).

Organizational structure of the Chu-Talas Commission
The results achieved in the projects:
UNECE/ESCAP/OSCE (2003-2006) - Chu-Talas I
UNECE/OSCE (2009-2011) - Chu-Talas II

Further results:
- A new Agreement on cooperation in the field of sustainable development;
- International Basin Council;
- International Basin Water Management.
- Automation of accounting is conducted on the water main water intake facilities of interstate use of Chu and Talas. Automated control systems SCADA allow remote control of the system;
- Developed and operates a Database Basin for the annual distribution of water resources between countries. First steps were taken to establish the mathematical model, the accuracy and efficiency of data provided;

Work is underway to establish a system of automatic safety monitoring Kirov dam on the transboundary river Talas;

Create an Information-Analytical Bulletin Operational Hydrological Data Basins Chu-Talas separately for national parts on the basis of a uniform mathematical model, with a view to establishing a mutually beneficial regional online database. The planned process of organizing data collection in the Kazakh part of the basin:
Experts in Kazakhstan and Kyrgyzstan describe the overall growth of aridity and the declining availability of water resources as the most likely and serious impacts of climate change in the basin. Developed measures, economic evaluation measures, lessons learned and prospects. Currently released an information brochure, with the assistance of the UNECE and UNDP in English and Russian languages. Recommendations Chu-Talas Commission—Organize and lead the development, implementation of specific measures and actions to adapt to climate in the basin, including the principles of IWRM.

Waiting on Commission:
- Consider integrating the results of the project work plans / activities Commission;
- The development of Adaptation Strategies at the level of the Chu-Talas transboundary basin.

In Kazakhstan, many state programs include elements of adaptation industries expected climatic conditions. Prepared 3-6 Kazakhstan National Communication on Climate Change, where the most vulnerable are called water sector and agriculture. In these sectors, major development programs:
- State Program of Water Management for 2014-2040 years
- The Program for Development of Agriculture for 2013-2020

At the Local Level are carried out activities that improve the resilience of agriculture to climate change within the framework of the Regional Programme for Reconstruction of Irrigation Systems and Rehabilitation of irrigated lands of Zhambyl region with the use of resource-saving technologies in the years 2014-2030.
Currently, under the Commission in cooperation with UNECE, UNDP launched the GEF project "Promoting cross-border cooperation and integrated water resources management in river basins Chu and Talas»

**Project Objective:** Promote integrated water resources management in the basin, including the support of the Commission.

**Expectation of realization:**
- In-depth analysis of the situation, the adaptation of control systems, use of water resources and related ecosystems
- Development of the institutional structure of the Commission in the context of strengthening the environmental aspects of its activities, taking into account the possibilities of further expanding the scope of cooperation
- Development of a monitoring system of water resources in the basins.

**Participation in international cooperation**

Secretariat of the Commission with experts all over the world participate in the regular working meetings of the Task Force on Water and Climate Adaptation Transboundary Basins to Climate Change, the Global meetings of the Network of Basins, seminars on Risk Management of Cross-Border Floods in Geneva, Switzerland.
Activities of the projects funded by the International Organizations and Donors

Support for the International Community

**UNECE**

UNECE / OSCE joint project “Development of cooperation in the basin of Chu and Talas Rivers” (Chu-Talas II)

Creating Interactive Operational Hydrological Bulletin in the basins of the Chu and Talas

**OSCE**

UNECE project “Dam safety in Central Asia: Capacity building for regional cooperation”

Swiss Agency for Cooperation and Development project “Promotion of Interstate Water Management Cooperation on Transboundary ChuTalas Rivers

UNECE/UNDP/EU project on “Water and climate change adaptation in the Chu Talas River Basin

Support for the International Community

The Republic of Kazakhstan has joined many conventions of the United Nations, among them:

- **On the Protection and Use of Transboundary Watercourses and International Lakes**, signed in Helsinki (Finland) in March 1992, the Law of the Republic of Kazakhstan dated October 23, 2000

- **According to International Watercourses New York, 1997**

Embarked on the development of a **Green Economy**. The catalyst will be the International Exhibition **EXPO 2017** in the capital Astana
Thank you for attention

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