**Background of country**

* An area of 2,724,900 km² makes Kazakhstan to the largest landlocked country in the world, although it has a shoreline at the Caspian Sea but the country has no immediate access to the world’s oceans. Compared it is almost the size of Argentina or slightly less than four times the size of the US state of Texas.
* Border countries are China, Kyrgyzstan, Russia, Turkmenistan, and Uzbekistan.
* The Kazakh language is the state language, and Russian has equal official status for all levels of administrative and institutional purposes.
* Kazakhstan is a member of the United Nations, WTO, CIS, the Shanghai Cooperation Organization (SCO), the Eurasian Economic Union, CSTO, OSCE, OIC, and TURKSOY.

According to a water availability indicator, Kazakhstan has scarce reserves of renewable water resources. Its geographical position, continental climate, aridity and its relief peculiarities contribute to a specific nature of formation and regimes of surface water resources in Kazakhstan. These cause uneven distribution of water resources by seasons and by territory.

**Rivers, lakes** are main water source in Kazakhstan and they deserve special attention. Today the territory of the country is divided into 11 river basins, 8 of which are major basins and 3 are minor basins

**Underground waters** are also distributed unevenly across the territory, and their quality and quantity vary from area to area.

**Water in agriculture**

Agriculture plays an important role in the development of Kazakhstan; the most important crops are wheat, maize, rice, oats, buckwheat, cotton, potatoes, vegetables, sugar beets, sunflowers

Agriculture is the main consumer of water, accounting for 75% of the total volume. Industry consumes an average of 18-22%, whereas the annual use of water for domestic and municipal needs is up to 7% of total consumption.

The problem of provision of high quality drinking water is yet to be solved in Kazakhstan. Adequate provision of piped water is on average no more than 75%. Of late, provision of drinking water from decentralized sources – wells, open reservoirs, and aryks – has been on the increase.

It can, therefore, be stated that water supply and sewerage systems in Kazakhstan are in a critical state: they do not ensure sufficient water supply, the water supply is not reliable and is of low quality; utilization of water sources and the cleaning of sewage are becoming more and more inefficient, hence the low quality of water results in an increase in the spread of diseases.

Lack of water resources, territorial and seasonal unevenness of their distribution in combination with frequent arid summers and intense competition for water create potential conflicts.

**Water Resources Management**

At the national level, state water resource management and conservation is implemented by the **Water Resources Committee of the Ministry of Agriculture**, and its basin water management units.

**Local representative (maslikhats) and executive (akimats)** bodies manage water relations at the regional (oblast) level, within their authorities.

State water management in Kazakhstan is based on the principles of recognizing the national and social importance of water resources, sustainable water use, separating the functions of state control and management and basin management. Based on these principles, the government began structural reorganization of the water system, aimed at clear assignment of responsibilities at national and local levels.

Because of the lack of national funds to address water issues, leading to deterioration of facilities and structures, there is a need to involve the private sector in the water sector – mostly in water supply and rehabilitation and maintenance of water systems. In forming this water ‘market’, the basin water management units will play an important role in setting clear goals for privatization in the water industry and elaborating its rules and legal base

The country is seeking assistance from international financial institutions to resolve water sector issues such as the EBRD, World Bank, Asian and Islamic Development Banks, UNDP and o Structural reforms on irrigated land are needed to maintain food security in Kazakhstan, to ensure a high level of the population’s self-sufficiency in agricultural production. This includes increasing economic performance, meeting environmental requirements and introducing water-saving technologies. Restructuring of irrigated cultivated areas consists of reducing cotton and cereals and increasing the share of oilseeds and legumes, including perennial grasses. In parallel an increase in productivity in rainfed areas, where most of the cereals are grown, is important.

Further socio-economic development and the solution of various ecological problems will be greatly determined by a water policy that addresses development and control of water management. Radical economic reforms taking place – including in the area of water management – also make specific demands on water policy.

**The aim of the national water-use strategy is to first protect water and implement efficient water-saving technologies in all spheres of water management.**

Stakeholders in the sector:

• Government, **Government approves Plan for Development of Irrigated Lands until 2028: 4.5 times increase in gross revenues and creation of 300 thousand new jobs.**

The main goal of the program is to provide irrigated land with water on an area of ​​3.5 million hectares. At present, the area of ​​irrigated land is 1.4 million hectares. The implementation of the Plan envisages the restoration of out-of-turn but demanded irrigated lands on an area of ​​600 thousand hectares and the introduction of new 1.5 million hectares

• Municipalities

• EBRD - has this financing in their portfolio, Israel is a shareholder, they are interested to expand to the market by taking more of such projects.

• Asian Development bank- Country Director of the Asian Development Bank in Kazakhstan Giovanni Capannelli said that the Bank will soon complete work on a large Memorandum of Understanding with the Ministry of Agriculture on investing up to $2 billion in the sector for 2019-2021. The main component of this memorandum is a focus on supporting the modernization of irrigation sites.

As already told by Ministry of agriculture - reconstruction of existing potable water treatment plant has been announced as well.

In addition, the following problems should be emphasized in the water management:

• most efforts on deficit prevention are mainly aimed at the infrastructure development, and not at the water demand reduction;

• low efficiency of water resources utilization (performance) in Kazakhstan as compared to the other states: the national economy requires three times more water per dollar of the Gross Domestic Product (the “GDP”) than in Russia or USA, and six times more than in Australia;

• existing tariffication system and approved tariffs, especially in the agriculture, do not cover the required operational costs and depreciation charges;

• insufficient water saving stimulation in all sectors, especially in the agriculture, where losses reach 66%;

• scarce investments in the infrastructure both in construction of new facilities to provide water access and in maintenance of the existing infrastructure facilities;

• severe wear of the whole water management infrastructure;

• uptrend in the recent years of material damage from the adverse water effect as a result of high waters, floods, change of the water body banks, territory flooding with groundwater, swamping and land salinification, and water erosion;

• lack of the complete governmental record-keeping of water facilities and lack of the common information database of water bodies (state water cadastre) to provide access thereto to all interested persons.

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