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Asia Water Forum 2022

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Focus Area: Water as a sustainable resource

Session Title: Water as a sustainable resource

Schedule: 10 August 2022 (Wed), 9:00 a.m. - 10:30 a.m. (GMT+08)

Water Infrastructure in Central Asia: building capacities and policies to promote sustainable financing and private participation

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ADB



Background and Rational

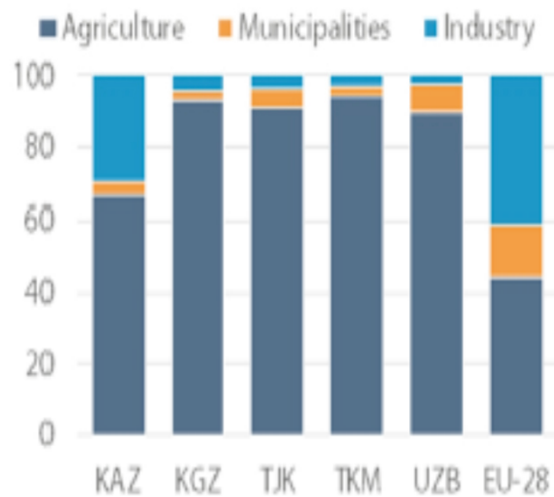
- **Water:**
 - Key driver of socio-economic development in Central Asia
 - Precious, limited and non-renewable resource
 - Access to water resources is a key economic, social and political priority of each riparian state
 - Business as usual scenario will lead to increased competition for water resources at all levels of water systems
 - Critical element to enhance and limit economic development in the region
- Annual **total water resources**- 116 cubic km and 90% from Amu Darya and Syr Darya
- Impact of **climate change**:
 - Water shortages, equalling 8-10% of current water uses
 - Per capita water availability in the region will drop from 2500 cubic meters/per capita per annum to 1400 cubic meters/per capita per annum.
- **Sustainable and effective water systems** = Improved water infrastructure



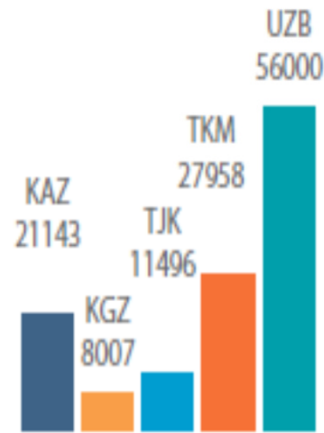


Background and Rational

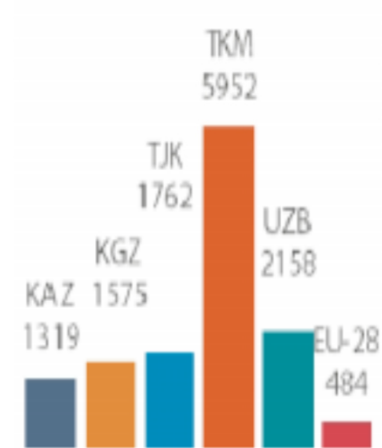
Water use by sector, % of total use



Total water use, million m³/year



Total per capita water use, m³/year





Infrastructure Financing in CAREC region

- **Demand** for infrastructure investment - 5-7% of GDP per annum
- Infrastructure **investment “hunger”**:
 - Economic growth: limited due to infrastructure bottlenecks
 - High public debt levels, equaling >40% of GDP in average
- **Major areas** of infrastructure investments:
 - Transport- 44%, power generation- 38% and water-sanitation – 6%
- Infrastructure investment needs are **emerging**:
 - Rehabilitation or extension of existing/outdated
 - New infrastructure development





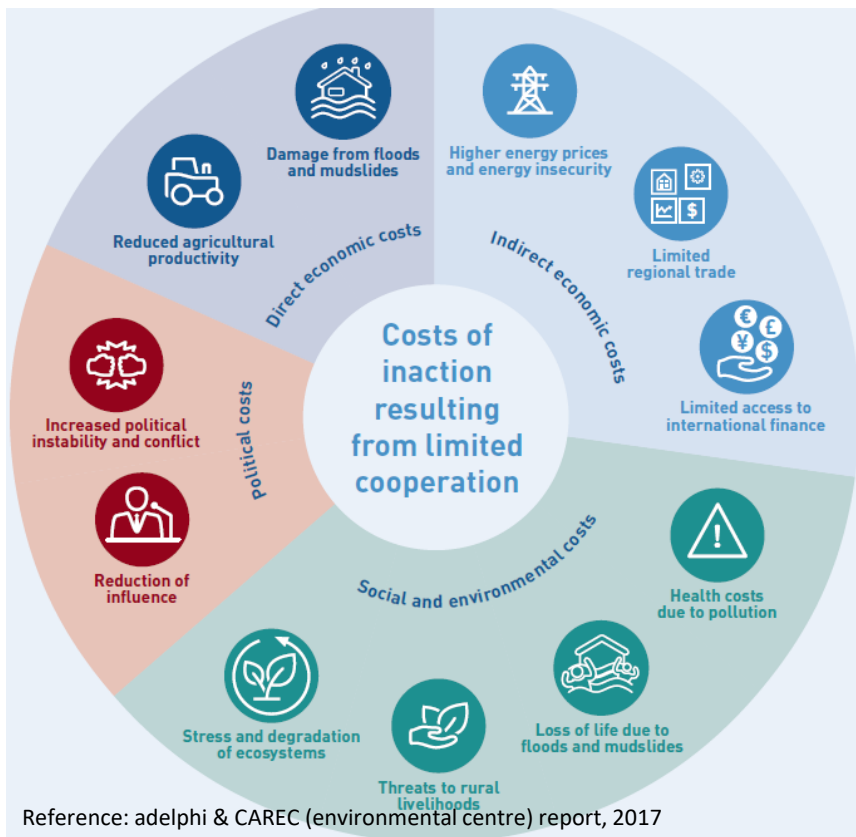
Water Sector Financing: current situation

- **Water sector is a state funded** and operated by state or semi-state organizations
- Currently states not able fully fund - **infrastructure, human and transport needs are inadequately funded**
- Delayed investments in the water sector - **water infrastructure in inadequate conditions**
- Shrinking and insufficient financing - serious **delays in O&M**
- CAREC region's need for investments to rehabilitate and build new infrastructure is around **8-10% of GDP annually or \$35-40 billion per annum.**





Water sector in Central Asia

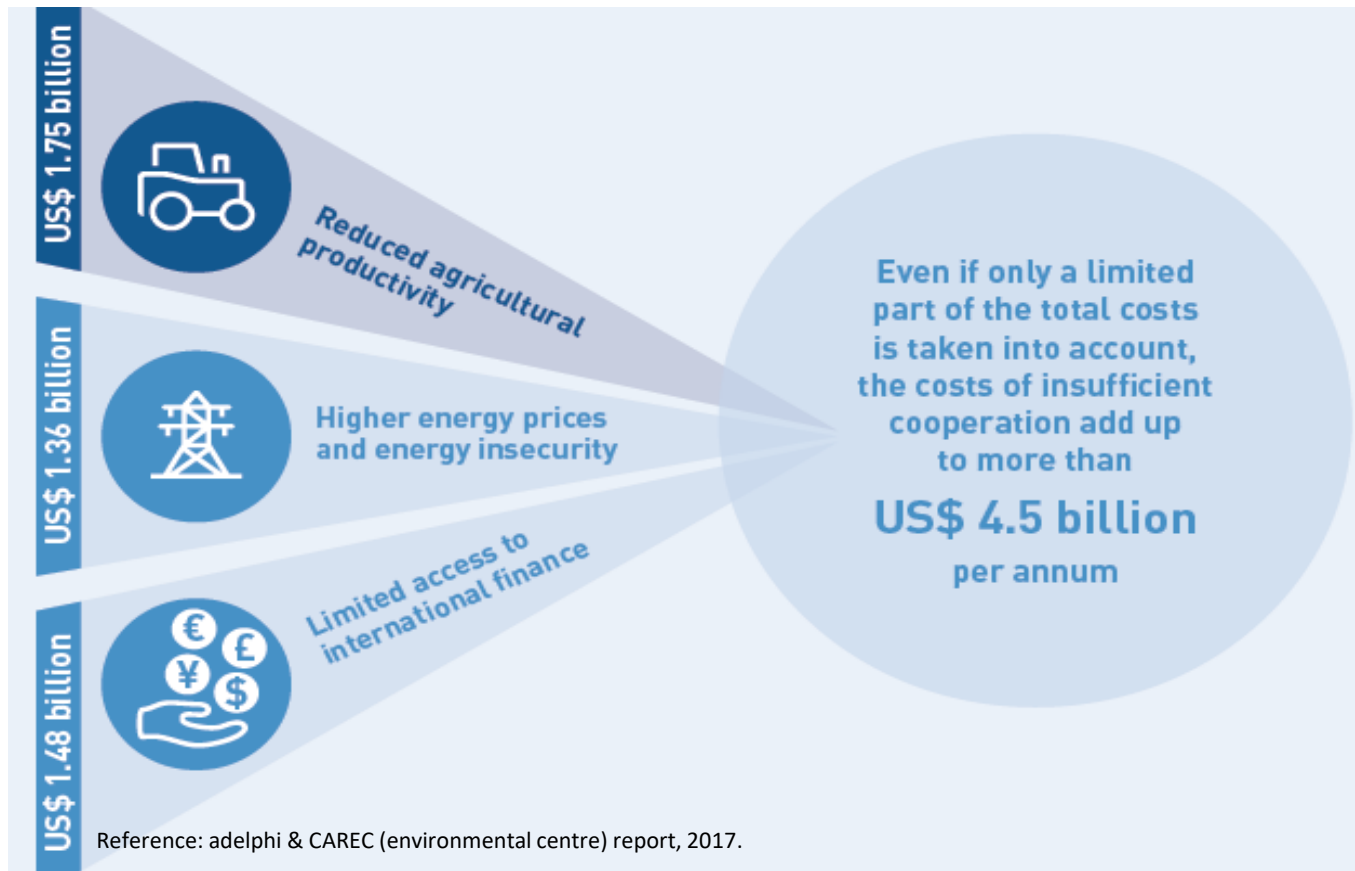


- Due to deteriorating infrastructure, these costs will inevitably increase if (transboundary) water management remains unchanged;
- Limited cooperation is limiting access to international finance as well that could benefit transboundary water infrastructure.



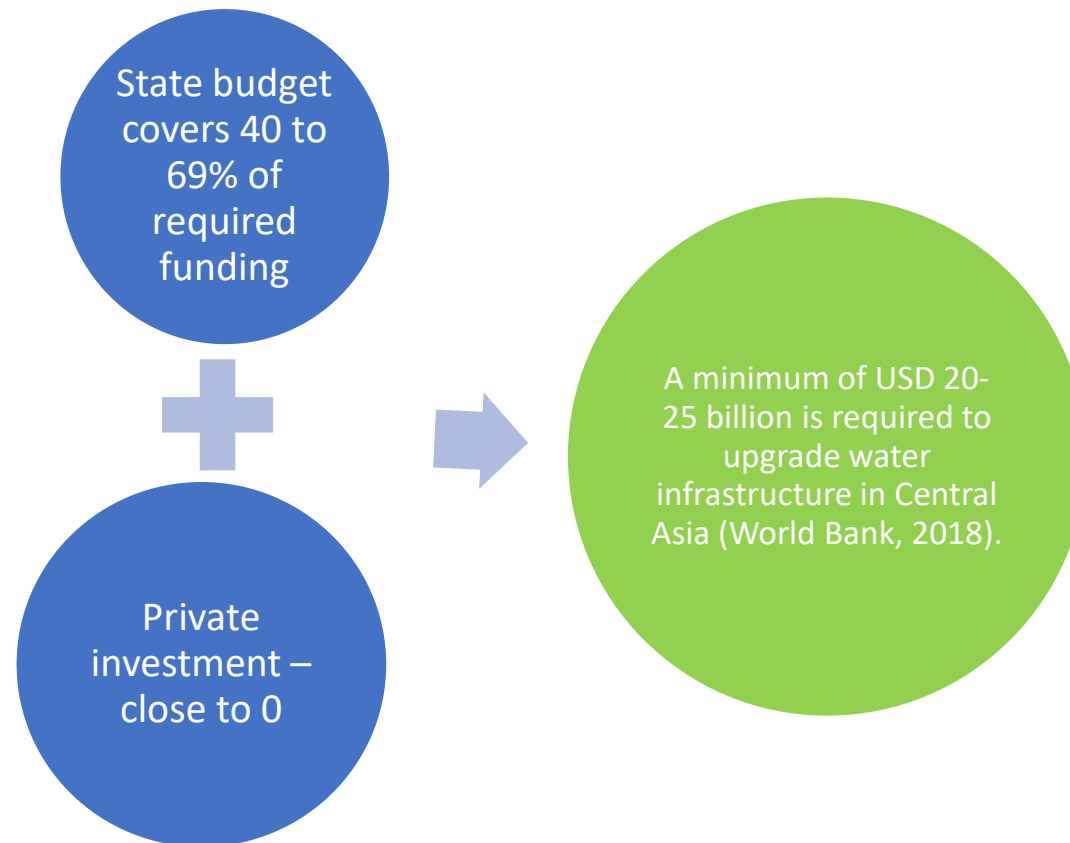


Water sector in Central Asia





Water sector financing in Central Asia





Water sector financing in Central Asia

- Agriculture land and water reforms in Central Asia -**unfinished business**
- High level of **regulations in agriculture** production systems, land ownership
- Role of state in **social stabilization**: providing food, water security to the population.
- **Downside**- tightly regulated system = reduced incentive for private financing for the sector, especially infrastructure.





Policy Recommendations

- Introducing **public-private partnership** schemes into the irrigation services. Water service delivery and O&M functions to private companies. This can trigger the intensive use of technology in the sector.
- **Political commitment & enabling legislation** – a state guarantee at the policy level for involving the private sector. Without stable investment climate and business opportunities, the private sector will be reluctant to mobilize resources.
- **Improving governance and efficiency.** This increases the rationality and benefit of every dollar invested, which improves eventually credit worthiness of the sector.
- **Expertise.** State as a regulator and business as investor must have necessary financial, legal and technical skills to deal with process.





Policy Recommendations

- **Reforms of agriculture policies** = more of market oriented, de-regulated policies -generate interested to invest in the water services
- Setting up more of **multi-purpose water schemes** in the irrigated areas. The concessions of infrastructure and land around the irrigation infrastructure, renting out facilities to the private uses will bring more finances to the water sector.
- Setting up **water-energy consortium** for the *Syr Daraya* and *Amu Darya*. Joint financing and operation of transboundary infrastructure, benefit sharing schemes;
- **Economic frameworks** to promote cooperation and integrated planning among sectors – promote nexus approach.

