

Water Cooperation in Central Asia: lessons and opportunities

Dr. Iskandar Abdullaev
Regional Environmental Center Central Asia
(CAREC)

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Water Challenges of 21st Century

- Water – is a **key challenge** of sustainable development:
 - Access to good quality and right amounts
 - Competition among transboundary basins
 - Climate- induced water stress
 - Low productivity and efficiency of water use
- Water is key **ingredient of economic growth** and social justice:
 - Water in economy is key element
 - Water as part of environmental service

Water Challenges of Central Asia

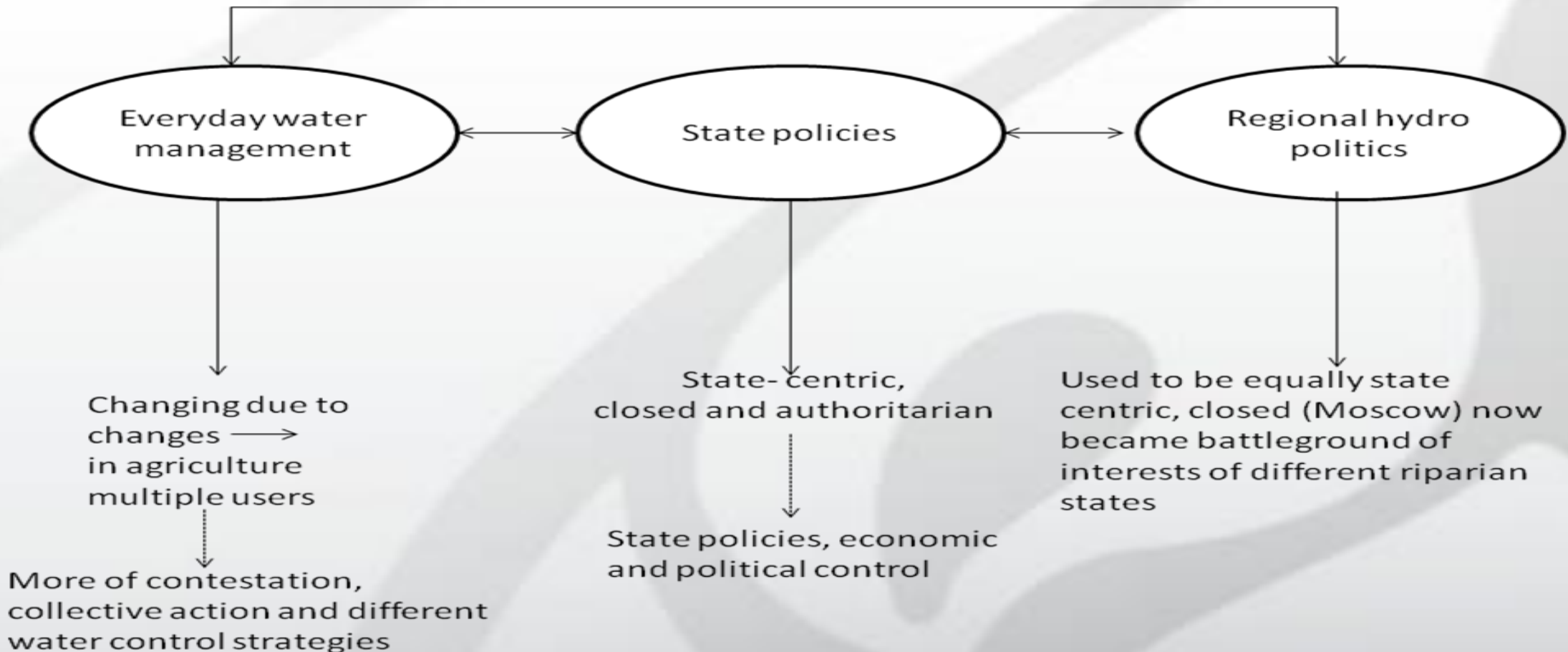
- 60 million people (90 million in 2050)- **demographic pressure**
- Growing economy- total GDP \$600 billion+ \$4-5 billion annual growth - **economic pressure**
- 25-30% water, 28-35% food and 27-35% of energy **deficiencies** in Central Asian countries by 2050 (World Bank.2015)
- Resource intensive- high footprint **development mode**
- Outdated infrastructure, institutes and policies- **path dependency**
- Serious consequences of climate change- **new challenges**

Water Cooperation is a pillar of sustainable development

- Water resources are **transboundary** and requires coordination and cooperation
- Central Asian countries needs water for their development: **water dependent** societies and economies
- Water development **programmes/positions** of Central Asian states differ
- Post- Soviet **institutional arrangements**
- Global and international **instruments**
- Emerging regional **dialogue platforms**

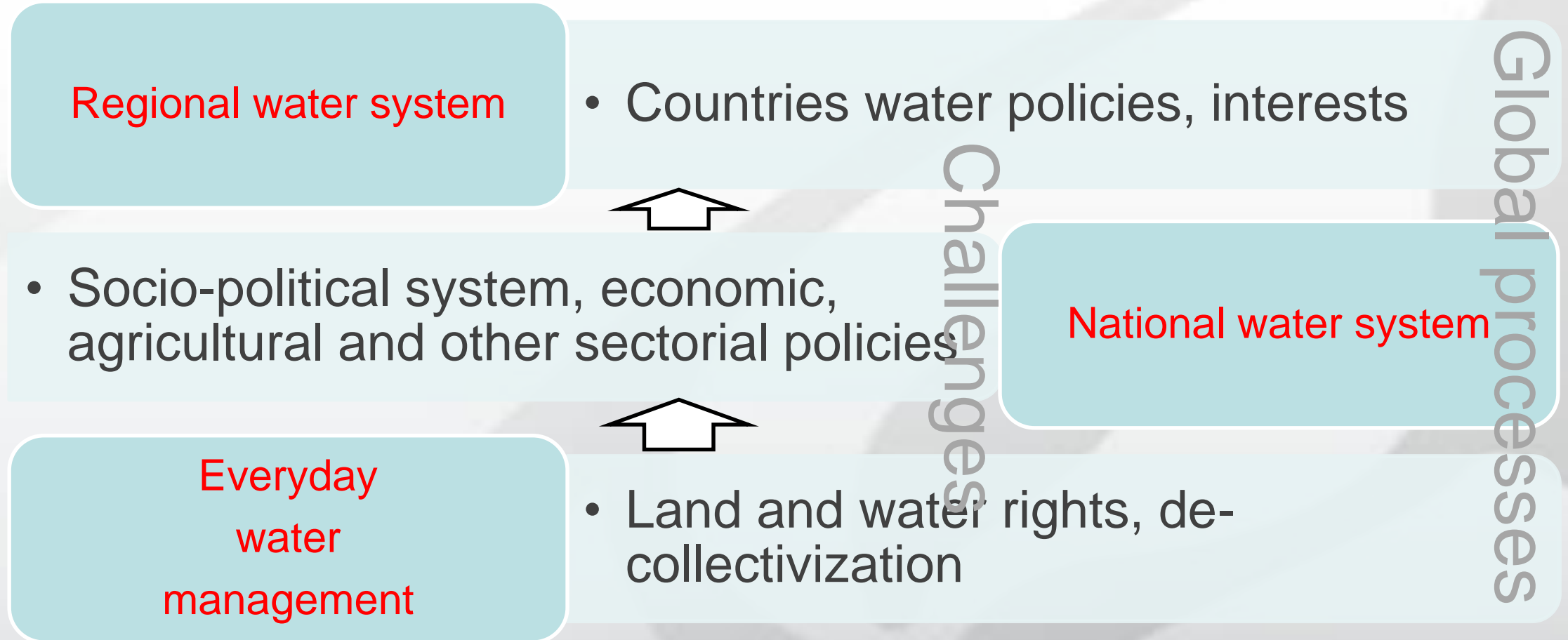
Water Transformations in Central Asia

From fully state dominated water management to multiple dynamic systems



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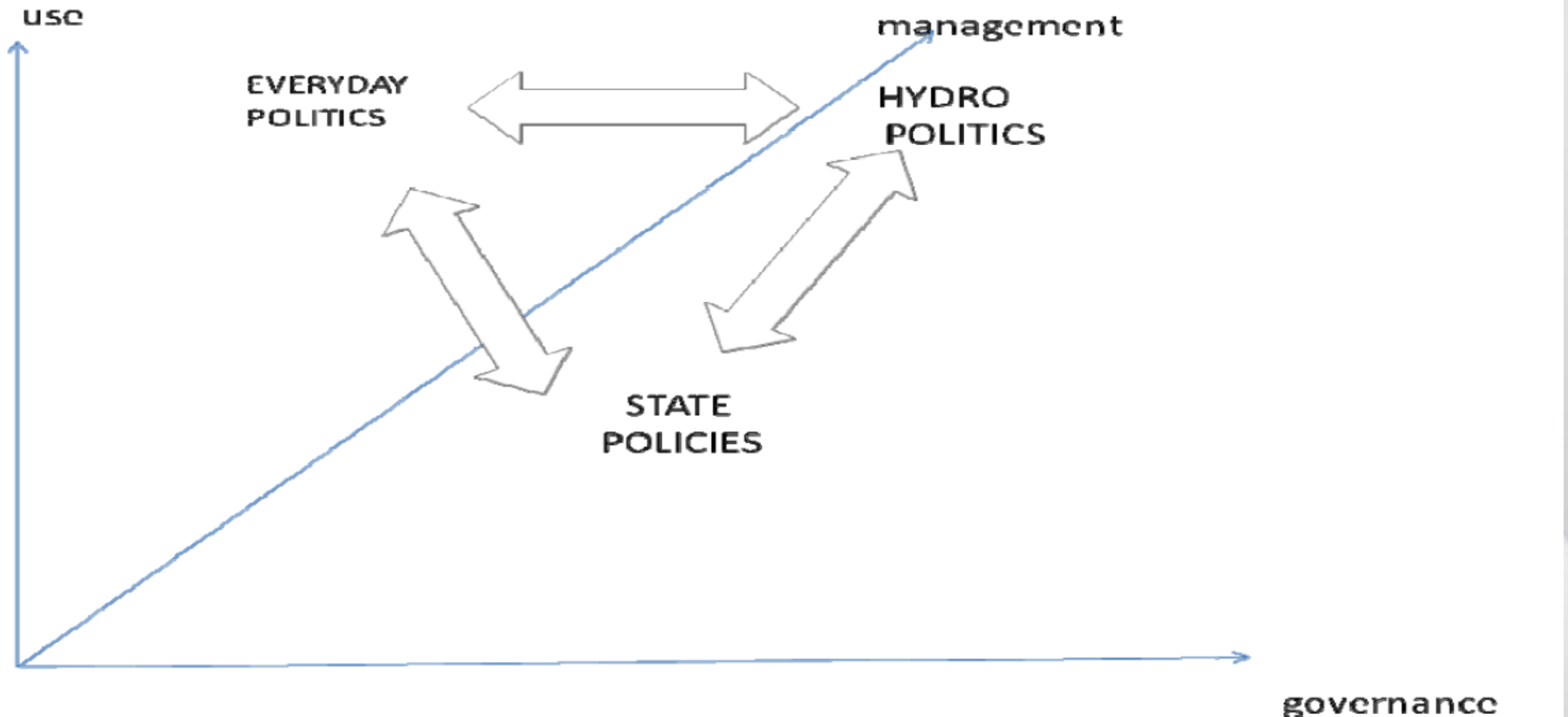
Water Cooperation in Central Asia: levels and linkages



Water Cooperation in Central Asia: some findings

- **Low land and water productivities:**
 - considerable scope for improvement between dry and wet years (25-30%)
 - Other factors must be considered in water saving (e.g., labor saving could be up 29-30%, time spend for irrigation 2 times less)
- **Water allocation and distribution:**
 - Very low reliability, 57-60% of water users in low reaches are not happy with water supply
 - Acceptance of rules and good local practices (*avron, navbat, etc*)

Water Cooperation in Central Asia: some findings



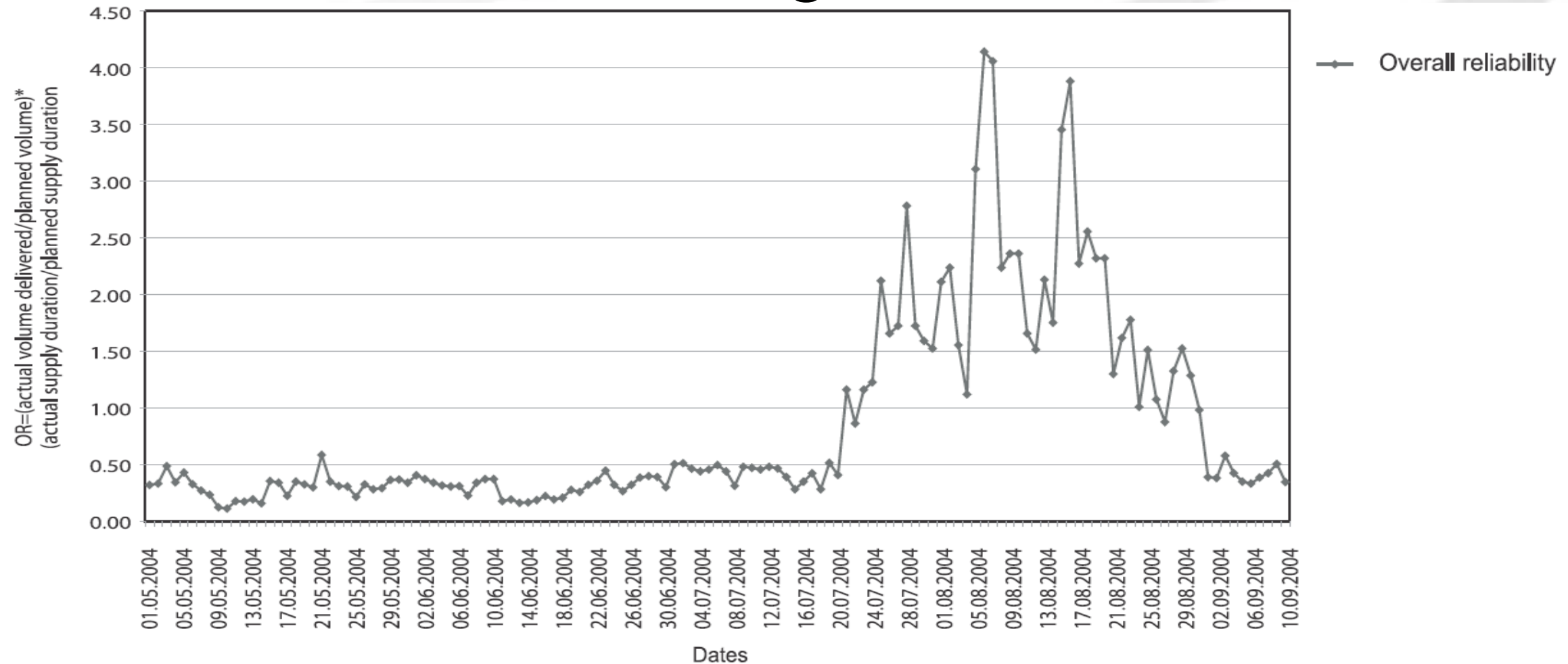
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Source: Abdullaev and Mollinga.2009

Water Cooperation in Central Asia: some findings

- **Performance of Water Institutions:**
 - Reforms are targeting socio-economic changes in society
 - Institutions are at least capable of reducing locale level conflicts
 - Operational issues overwhelming than strategic planning
- **State of infrastructure:**
 - Changes in water sector in Central Asia is not classic IMT: state did not transfer functions for operation and maintenance fully to farmers
 - Results of agricultural reforms: infrastructure is unfitting to new context of land distribution

Water Cooperation in Central Asia: some findings



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Water Cooperation in Central Asia: major research areas

- How to share **benefits of water** vs. volumes
- **Institutional solutions** to the “everyday water problems”
- Water as part of the economic and social transformation: “**out of water box**” approach
- **Role of infrastructure:** state and rehabilitation, new and old, allocation and monitoring
- **Planning and strategy setting:** long-short term planning, operational aspects, water strategies and visions
- **New uses** of water and “new water” (re-use, salt-drought tolerant, productivity)
- Climate change **impact** on water management and governance

Water Cooperation in Central Asia: timelines and modes



1990's- 2000's

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Water Cooperation in Central Asia: lessons learnt

- Water cooperation is **outcome of changes** at the different levels: everyday, national and regional
- Water cooperation depends on **technical, managerial and political decisions**
- Water cooperation is **a process not event(s)**: whole and holistic assessment of process is required
- Water cooperation requires new solutions, approaches, instruments and tools- **research and science** is a key in future of water cooperation

Water Cooperation in Central Asia: CAREC's approach

- Regional working groups on thematic areas: water quality, cross-border cooperation – **joint work**
- Exchange of experience through demonstration of best practices - **strengthening trust**
- Capacity building – **common understanding**
- Regional platform for cooperation – platform to coin a common position
- Involvement of different stakeholders (levels, sectors) - **multi-sided view for the questions**

Water Cooperation in Central Asia: CAREC's approach



**Process
initiation**

**National
consultations**

**Regional
meetings to
generate joint
approach and
vision**

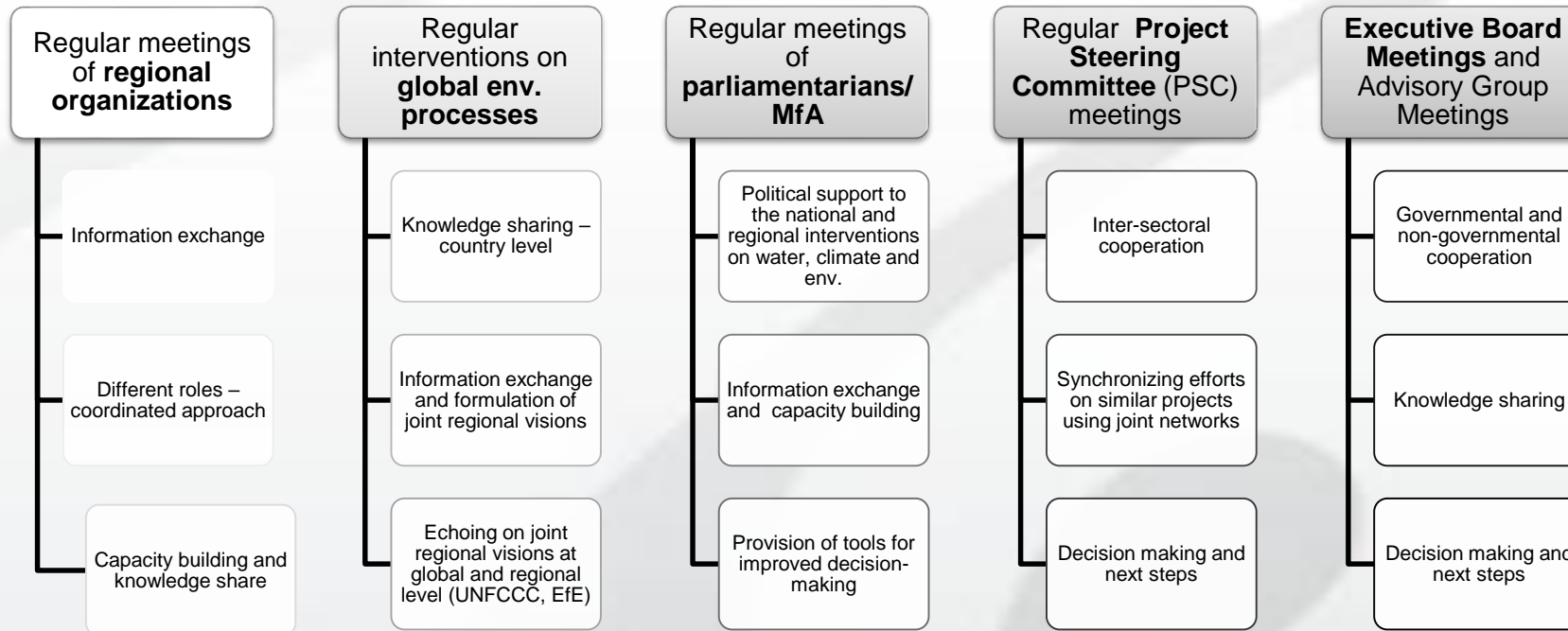
**Collaborative
participation in
large-scale
international events**

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Water Cooperation in Central Asia: CAREC's experience

- Contribution and participation at **National water dialogues**(EU, 2008-2009)
- **Water quality** in Central Asia(UNDP, 2009-2012)
- Promoting **cross-border cooperation** on small streams in Central Asia(USAID, 2012-2016)
- **Transboundary Water Management** in Central Asia (AA- GIZ, 2010- on-going)
- **Integrated water cycle management**: capacity building, its influence on education system and business, TEMPUS programme (EU, 2012-2016)
- Water, Education and Cooperation- **Smart Waters** (USAID, 2015-2020)
- «Promoting dialogue for conflict prevention related to water nexus in CA Central Asia Water - Nexus Cooperation (**CAWECOOP**)» (EC, 2015-2017)

Water Cooperation in Central Asia: CAREC's Dialogue Platforms



Inter-sectoral and multi-country cooperation with governmental and non-governmental agencies to share information, formulation of joint sub-regional vision, decision making and political support is a CAREC's formula towards **sustainable knowledge management** in Central Asia +ADD KPRM

Water Cooperation in Central Asia: CAREC's Knowledge Approach

CAREC's Unit: **Knowledge - Projects - Resource – Management (KPRM)**

- **Flagship knowledge products:**
 - Methodologies (e.g. NAMA forestry), analytical reviews, research
 - Guidelines on water basin planning
 - Curriculum on Green Pack, SDGs
- **Flagship tools:**
 - Shared Environmental Information System (SEIS)
- **Fellowship programs in associated universities**
 - DKU (Master's Program), IAMO (PhD's)
- **Annual Leadership Program**
 - Outreach and capacity building of young leaders, professionals
- **Thematic websites**
 - Water (riverbp.net; iwebtempus.kz), energy (caeelp.com), climate (led-ca.net)

Means of outreach and circulation

Targeted addressee:

- Policy makers
- Experts
- Civil societies

• Regional cooperation platforms

• Online resources (websites and periodic bulletins)

• Media and social networks



THANK YOU!