



Leibniz Institute of Agricultural Development
in Transition Economies

Transformations and current trends of water governance in Central Asia

Dr. Iskandar Abdullaev

Regional Environmental Center for Central Asia (CAREC), Kazakhstan

Contact email: iabdullaev@carececo.org

**Paper prepared for presentation at the “Regional Economic Cooperation in Central Asia: Agricultural
Production and Trade (ReCCA)” conference**

November 24 to 26, 2014
Halle (Saale), Germany

Copyright 2014 by the author. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies. The papers present authors' own results and IAMO is not responsible for any errors contained in the data or analysis.

Abstract

Current water governance systems in Central Asian countries are shaped by recent water sector reforms and are past dependent. Since collapse of soviet system, countries of the region are implementing water policies, in line with their national development strategies. Moreover, agricultural reforms, socio-political changes have result new situation in rural areas which are having strong influence on everyday water management. The water management became a playground for different interest groups at all hierarchical levels. In this research, author has been applying institutional analysis, comparative study approach to understand system of water governance in different Central Asian countries. Author tried to link impact of the changes at local, national and regional levels on regional cooperation.

Keywords: water governance, water management, Central Asia, institutional analysis

1 Introduction and Research Questions

Since the collapse of former Soviet Union, Central Asian states are transforming their socio-political systems. The process of transformation affects all aspects of policymaking and economic activities, i.e. agriculture, industry, environmental policies. Water sector was among those of affected and greatly changed since 1990s. The transformation in different levels include increased competition for water resources at the everyday water management, replacing state control with different socio-political control elements at the national and increased competition of national interests in the transboundary level

The water management in Central Asia as elsewhere in the world is a social, economic and political process. The collapse of the centralized planned, economy and gradual implementation of market principles in the former Soviet states of Central Asia changes dramatically water governance and management. The changes in water sector are institutional, policy and technical systems (YALCHIN AND MOLLINGA 2007, SEHRING 2009). The water sector of Central Asian states is still in transformation and an unfinished business. Socio-political and economical transformations of post-soviet period have resulted institutional and technical vacuum both due to limited monetary support and degradation of human capacities in water management organizations of Central Asian states.

Along with de-collectivization in agriculture sector (e.g., individual farming systems), water management system was also transformed in Central Asia at two levels i) river basin/watershed and ii) on-farm level. In 2000s, at river basin/watershed level, water management was transformed from a territorial-administrative to hydrographic principles in three countries of Central Asia (namely: Kazakhstan, Kyrgyzstan and Uzbekistan) with slower process in Tajikistan (recent reforms) and stagnancy in Turkmenistan. Main research questions of this study is how different transformation in the region have affected water sector at different level, what are the major changes in water sector took place since independence of Central Asian countries and what are the current trends, drivers in the sector?

2 Data and Methods

The research for this paper have been gathered from the authors empirical work in different development projects and water sector reform processes in different Central Asian states.

Key inputs are coming from IWRM Fergana project, funded by Swiss Development Cooperation (SDC), Khorezm project, funded by German Ministry of Education and Research (BMBf) and Transboundary Water Management in Central Asia, funded by German Federal Foreign Office (AA). The project had local, national and regional components, active in five states of Central Asia. Moreover, all project had both research and experimental components, providing opportunity for author to prepare research interventions and implement them within the scope of the projects.

Author have applied concept of socio-technical and socio-political aspects of water management (MOLLINGA 2008, MOLLINGA et al. 2010). The water management have been long counted as technical issue in the Central Asian countries, technocratic and hydraulic mission concept have been overwhelming. Current socio – political changes brought more of common pool resource characteristics into the water management (OSTROM 1992). Countries of the region have been implementing IWRM principles, trying to apply river basin paradigm to address complex water problems they face (HOEKSTRA 2011, MOLLE 2009)

Series of interviews, desk-studies and field level observations have been applied for collection of data and information for the study. Political bodies, water organizations and water user's organizations have been examined and their performance compared for period of study (1990-2010).

3 Main results and Discussion

In Central Asia, changes at the national level of water/irrigation sector are mainly shifting from administrative-territorial into hydrographic principles, introduction of IWRM into new water legislation. In the most cases, national water agencies have been merged with national ministries of agriculture or environment, only status quo remained only in Turkmenistan. While institutional transformation concerned mostly with change in governance and management, ownership, operation and maintenance responsibilities for major hydraulic infrastructures are still in state jurisdiction. Yet, already in Kazakhstan and Kyrgyzstan, private ownership of some hydraulic infrastructures at lower levels are introduced, remaining state property in Turkmenistan and Uzbekistan with some elements of concession management by private entities in Tajikistan. Predominantly, hydraulic infrastructures of water supply and sanitation are subject of private property from national private entities; even foreign companies own some hydroelectric power plants in Kazakhstan and Kyrgyzstan.

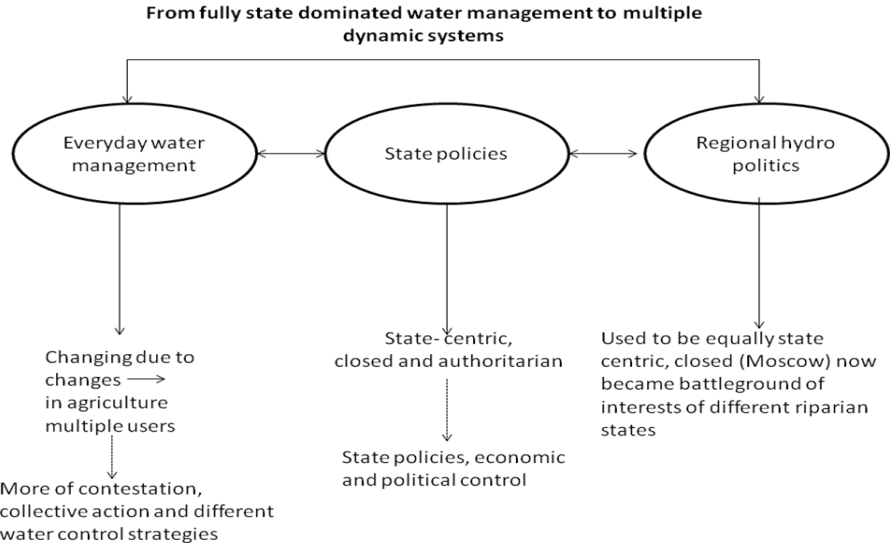


Figure 1. Transformations in Water Sector of Central Asia (Abdullaev and Atabaeva, 2012)

Because of reforms in agriculture, irrigation management transfers programs have been widely implemented in the region yet with mix outcomes/results. There is heterogeneity of WUA models such as hydrographic versus administrative based, top-down (government initiative) versus bottom-up (donor financed) models and the institutionally supported versus technocratic models. Water users’ associations (WUA) have been created to operate and maintain secondary hydraulic infrastructure in four countries of the region, except Turkmenistan.

The water governance systems in Central Asian countries differ from each other (Table 1) which in turn have a strongly shaping regional water relationship. Therefore, a key for sustainable regional water cooperation is depending on how different water governance regimes of Central Asian states could be coordinated.

Table 1. Water Governance typology (Abdullaev.2012)

Water governance systems	Elements of water governance
State led and state controlled (state centric):	<ul style="list-style-type: none"> ✓ Weak users organizations (WUAs) ✓ State funded and controlled WMOs ✓ Territorial water management with some basin management elements ✓ Water is security issue
Decentralized water management:	<ul style="list-style-type: none"> ✓ Emerging viable WUAs ✓ limited state support ✓ Basin management
De-regulated water management:	<ul style="list-style-type: none"> ✓ local water management ✓ WMOs are incapable to implement water policies ✓ National policies are de-linked from local realities

4 Conclusions

Transformations in economic, political and social spheres in the region's countries have led serious changes in the water sector. Currently, water management in Central Asian countries are highly fluid, changing management and more importantly governance aspects. Major changes are related to the increased contestation on water allocation at all levels of water system. Moreover, different priorities at the local and mezzo levels shape policies at the national level. Therefore, regional level cooperation in the region could be if only national policies are at least compatible.

5 References/Bibliography

- ABDULLAEV, I. 2012. Socio-Technical Aspects of Water Management in Central Asia. LAP-Lambert Academic Publishing. Germany. 105 pp
- ABDULLAEV, I., and ATABAEVA S, S. 2012. Water sector in Central Asia: slow transformation and potential for cooperation. *International Journal of Sustainable Society*, 2(23).
- HOEKSTRA, A.Y. (2011) The global dimension of water governance: Why the river basin approach is no longer sufficient and why cooperative action at global level is needed. *Water* 3, 21-46
- MOLLINGA P., BHAT A., SARAVANAN S.V. (2010) When policy meets reality: Political dynamics and the practice of integration in water resources management reform. LIT Verlag, Berlin
- MOLLINGA, P. (2008) Water, politics and development. Framing a political sociology of water resources management. *Water Alternatives* 1, 7-23
- MOLLE, F. (2009) Water, politics and river basin governance: repoliticizing approaches to river basin management, *Water International*, 34(1): 62-70
- OSTROM, E. (1992) *Crafting institutions for self-governing irrigation systems*. ICS, Oakland, USA
- SEHRING, J. (2009) Path dependencies and institutional bricolage in post-soviet water governance. *Water Alternatives*, 2(1): 61-81
- YALCIN R., MOLLINGA P.P. (2007) Institutional transformation in Uzbekistan's agricultural and water resources administration: The creation of a new bureaucracy. Working Paper Series No. 22. Center for Development Research (ZEF) University of Bonn, Germany