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## Elliott School of International Affairs

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## Addressing Soft Security Challenges in Kazakhstan and Central Asia

Kazakhstan has taken the regional leadership on soft security issues in the whole Central Asian region. On February 4, 2014, the Central Asia Program at the George Washington University organized a conference exploring the region's main soft security issues: water management, regulating migrations and refugees flows, developing disaster preparedness and reaction to climate change. It brought together scholars and experts to offer a full panorama of the soft security situation and the way Kazakhstan can address these challenges.

Johannes F. Linn, of Brookings Institution, first gave a brief overview of each of the four important and highly interrelated issues that were the subject of the conference. He then placed them into a broader economic and social context of Kazakhstan and Central Asia. He ended with a comment on the need for a more effective integration of political and economic

#### **Key points**

Kazakhstan has taken the regional leadership on soft security issues in the whole Central Asian region.

The region's main soft security issues are water management, energy security, human development (education, health, social protection and labor markets, regulating migrations), developing disaster preparedness and reaction to climate change.

Two important crosscutting policy areas have a direct bearing on soft security: regional cooperation, and the development of sound economic and political institutions.

In assessing the challenges and opportunities for managing the soft security in Central Asia, it is important to develop a balanced perspective that draws on both political and economic insights.

analysis in Central Asia. The key points can be summarized as follows:

- 1. Overview of the four core issues of soft security:
  - (a) Water/energy nexus: Historically Central Asia has ample water resources overall, but now faces water stress in significant parts of the region and increasing threats to water and energy security due to climate change. For the future improved national water management and regional cooperation will be critical.
  - (b) Natural disasters and climate change: Central Asia is exposed to significant natural disaster risks, esp. from earthquakes, floods and droughts, the latter two amplified by climate change. Improved disaster preparedness at national and regional levels will be critical.
  - (c) Food security: Some countries in Central Asia face serious food insecurity. Improved agricultural and rural development policies will be critical. Moreover, as a food surplus country Kazakhstan can play an important role in supporting improvements in regional food security.
  - (d) Migration: This is an important economic and social phenomenon in Central Asia. More supportive policies in sending and receiving countries will improve economic and social impacts.
- 2. The four soft security issues in a broader economic and social context: Taking a recent analysis of Kazakhstan's 2050 Vision as a departure point, he demonstrated how the four soft security issues relate to the core areas of the national and regional economic and social policy agenda, including human development (education, health, social protection and labor markets), energy sector development and green growth, urban and regional development, and diversification towards a modern knowledge economy. In addition, two important crosscutting policy areas have a direct bearing on soft security: regional cooperation, and the development of sound economic and political institutions.

3. Differing perspectives in political and economic analysis of Central Asia: He noted that political analysts tend to see Central Asian countries as failing states with dire prospects, while economists tend to view Central Asian economic developments over the last 15 years and its prospects positively by comparison with other developing countries. In assessing the challenges and opportunities for managing the soft security in Central Asia, it is important to develop a balanced perspective that draws on both political and economic insights.

#### Kathleen Kuehnast, of the US Institute of Peace, then discussed local conflict management and security in Central Asia.

Few areas in the world are as interdependent as the five landlocked Central Asian States--Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. They share networks of roads, waterways and a common political and economic experience as a subregion of the former Soviet Union. The legacy of Soviet gerrymandering of the administrative borders of the Central Asian republics in the 1920s, moreover, permeates current relations between the five states and compounds problems of trade, travel, water management, mineral rights and transportation. Local level conflicts in the region, as well as potential strategies for their mitigation, must therefore be understood in the context of the shared history and complex interdependence of mutually distrustful states.

Most of the major issues that generate local conflict extend across national boundaries in Central Asia. Responding to such conflict thus requires a regional as well as local approach. Among the most pressing local-level issues is the problem of defining respective borders, an issue that has become a high-stakes game among the five countries over the past two decades. Ambiguity and confrontation over borders at the national level aggravates border-related conflict at the local level. It also intensifies disputes over water, access to pastures and other resources, and impedes the flow of people and goods across borders, producing serious negative impacts on local residents, trade and national economic growth.

Shrouded in the problems of borders and trade is the more insidious security problem of the shadow economy comprised of the trafficking of humans, drugs and arms. This shadow economy relies on bribing border guards, which in turn creates an uneven playing field for legitimate entrepreneurs endeavoring to transport their products to markets. Further complicating the border issue is the threat of extremist incursions—both home-grown and imported from neighboring countries—facilitated by poor governance, political repression and drug money.

The lynchpin of local level security in the region is the allocation of water resources, a problematic issue in this arid region. Problems over water are both chronic and intense. However, due to deteriorating and poorly managed infrastructure, dissimilar water management practices and growing water demand among the five Central Asian states, water and energy shortages are increasing, as are local-level conflicts over water and energy at all levels. The upstream countries in Central Asia hold some of the world's largest fresh water reserves. The downstream countries have significant fossil fuel reserves. However, the failure of governments to adhere to formal agreements on the allocation of water and the exchange of water for fossil fuel have stymied efforts to reduce shortages. Thus, the need for both regional approaches and local level conflict management is essential.

Amid poorly defined and managed regional security agreements, understanding and creating mechanisms to manage local or "everyday" conflicts are paramount to the overall security of the region. Such conflicts easily disrupt livelihoods, hinder access to needed assets and resources, and destabilize community relationships. In addition, local level conflicts contribute to a pervasive sense of insecurity and reduce the legitimacy of official institutions that have failed to equitably manage conflicts and protect the people threatened by them.

#### Kai Wegerich, of the Consultative Group on International Agriculture Research, spoke on water security in the Syr Darya Basin.

In the international literature when focusing on water security in the Syr Darya, the focus is often

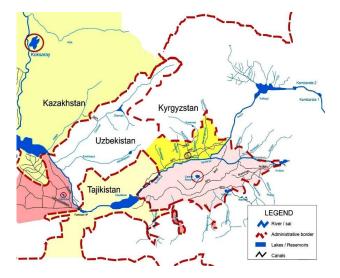
on the large transboundary infrastructure such as the Toktogul and Kairakum reservoirs in Kyrgyzstan and Tajikistan respectively as well as the planned new Kambarata 1 and 2 reservoirs in Kyrgyzstan. Hence, water security in the Syr Darya focuses mainly on the main stem as well as its larger water control infrastructure. This focus ignores how the Soviet Union designed and planned water management within the basin as well as the smaller transboundary tributaries (STTs) and infrastructure such as canals, reservoirs or lift (Wegerich et. al 2012a, Pak et al 2013).

Current water security definitions focus mainly on water demands of users and the ecosystem in an changing environment, however here a supply approach to water security is chosen incorporating direct and indirect security measures, such as surveillance and guards, redundancy and duplication of equipment, reliance on less vulnerable infrastructure as well as diversity of sources (Brown et al. 2003).

During the time of the Soviet Union the Syr Darya basin was divided into six irrigation districts (Upper Naryn, Ferghana Valley, Chakir, Midstream, Artur, Downstream) which were partly separated by reservoirs and included in some cases their own tributaries. Hence, water security within these irrigation districts was achieved by reservoirs and alternative sources (main stem through direct diversion or lift as well as tributaries). With the collapse of the Soviet Union not the whole basin, but individual irrigation districts or parts of it were at risk which either were dependent on transboundary infrastructure (river diversions or canals) or which had access to one source only. The irrigation district which were the most vulnerable is Midstream (Golodnayesteppe (Uzbekistan) and Dustlic canal (Uzbekistan and Kazakhstan)), as well as Downstream (Kazakhstan) since Midstream dependent solely on the operation of Kairakum reservoir and for Downstream the storage capacity of Chardara to save winterflows was not sufficient. In addition parts of Ferghana Valley irrigation district were at risk, such as the Big Namangan Canal (Uzbekistan) since the diversion infrastructure is located in Kyrgyzstan as well as the Tajik part of the Big and North Ferghana canal which are at the tail-end. In addition within the Ferghana Valley some Uzbek downstream areas of small tributaries are at risk in case they depend solely on the tributary.

Instead of cooperating with each other all states try to find solutions for becoming independent from each other. These solutions are based on capturing current unused winter flow or alternative sources. Kazakhstan built the Koksarai reservoir below Chardara, and plans two additional reservoirs to store unused winter flow, in addition it constructed lift from Chardara to the Dustlik canal as an alternative source. Uzbekistan is planning to construct the Sardova reservoir along the South Golodnyesteppe canal in Midstream, as well as constructed the Rezaksay reservoir between North Ferghana and Big Namangarn canal and the Markaziy reservoir along Big Andijan canal to store unused winter flow. In addition, Uzbekistan plans additional lift from North Ferghana to Big Namangarn canal to compensate for the lost diversion structure as well as lift in the Ferghana province to compensate for less water received along the smaller tributaries. Tajikistan started to divert water from the Isfara River directly into the Big Ferghana canal.

Figure 1: New reservoirs in the Syr Darya



While these are technical solutions to water shortages, it is questionable whether the water bureaucracy can guard the water resources to the users. Evidence from the Ferghana Province in Uzbekistan shows that after independence the water bureaucracy experienced reductions of staff and logistics to control water users. In addition, the maintenance budget was dramatically reduced putting into question whether the irrigation infrastructure is still functional.

On the other after independence in all Central Asian states collective farms were dismantled and land reforms started. Hence, while during the Soviet Union the water bureaucracy had to control only a few collective farms, after independence the number of water users increased substantially (for example after independence Ferghana Province had 162 collective farms, by 2011 the number of private farms was 11500). In addition, with independence the state-order systems either disappeared or was changed which increased the demand and needed more flexibility.

Hence, while on the international level there was too much emphasis on the operation of large scale reservoirs and no focus on small scale infrastructure (transboundary canals, reservoirs and lift stations) as well as on the water bureaucracy (only in term of "handing over" the system to users). On the national level there is too much emphasis on alternative sources and the storage of winter flow (the costs of electricity, environmental damages and downstream riparian needs are not necessarily considered). In addition, while the focus is mainly on technical solutions (new infrastructure) to water security, the old infrastructure as well as the water bureaucracy was neglected.

#### Richard Bodemeyer, of Deutsche Gesellschaft für Zusammenarbeit GIZ, addressed neglected options for tackling climate change in Central Asia.

His presentation picked up on preceding contributions of the conference and underlines the difficulty to arrange for regional cooperation between the countries in Central Asia. Although adaptation to climate change would be a strong case for concerted actions in Central Asia – especially as far as trans-boundary water management is concerned, the current political setting poses enormous obstacles to setting up activities which require contributions from more than one country in order to materialize.

He argued that climate change does not produce features which are principally new to Central Asian countries. Glacier melting, changing rainfall patterns, migration flows and loss of biodiversity are all processes which have been going on for quite some time already. Instead climate change speeds up existing degradation processes in natural resources endowment. In order to determine Central Asian countries' capacity to respond to the climate change challenge, it is suggested to examine how far the countries manage to deal with the existing degradation especially of soils.

Basically in three ecological contexts degradation is threatening the endowment with natural resources. Irrigated agriculture is not dealt with because the sector is predominantly under state control and deeply rooted inside the political economy of Central Asian countries, which makes the sector largely resistant against all kinds of reforms. In the two other degradation contexts, forest and pasture, those interventions have produced encouraging results in the past, which aim at achieving access and benefit sharing between resource users of different character and origin. In forestry it is private-publicpartnership between small scale land-users and government institutions based on contractual arrangements, in pasture it is collective management arrangements involving Central and Local Government institutions and pasture users. The lessons for future adaptation to climate change lies in the fact, that the strategy building is picking up on local coping strategies, on positive experiences made at local level and involving local populations in exploration and designing collectively acceptable solutions which can then be up-scaled to higher levels.

Obstacles on the way forward lie within the central state for who has still not recognized the strategic value of natural resources in enhancing resilience to climate change. Obstacles lie within those line institutions which are typically responsible for natural resources management and who have not yet overcome patriarchic state behavior in exchange for a modernized institutional attitude of communicating and negotiating with local resource users. A challenge lies also with local populations for which 60 years of collectivization has profoundly discredited all kind

of collective action beyond family or clan structures

## William Y. Brown, of Brookings Institution, investigated the implication of climate change for Kazakhstan.

The world is warming because of human influence. Carbon dioxide levels have risen from about 280 ppm in 1750 to 400 ppm currently due largely to use of fossil fuels. Concurrently, global temperature has risen by about 0.8 degrees Celsius. One key research synthesis by the U.S. National Research Council estimates that temperature will increase linearly by about 1.75 degrees Celsius per trillion tons of carbon added to the atmosphere. There will be some benefits from climate change, but overall the change is expected to be very costly for humankind.

Kazakhstan may secure some benefits from climate change through longer growing seasons and reduced demand for heating, but detailed national analyses indicate that costs will substantially exceed any benefits. The republic has warmed at nearly twice the global rate -- by about 1.5 degrees Celsius -- and summer droughts will probably increase. Water shortage is a key concern, which is amplified by the fact that some 44 percent of surface water in Kazakhstan originates in neighboring countries, including China which is actively diverting water upstream for agriculture and other uses.

Kazakhstan should pursue opportunities for mitigation (reduction) of emissions, but this will have little impact on global warming because the country contributes less than 1 percent of global emissions. A carbon tax should be implemented in lieu of the current, inefficient experiment in cap-and-trade. Other mitigation opportunities include more efficient building heating, transitioning from dirty goal to natural gas to generate electricity for domestic use, developing more electricity from water, wind, and solar sources. Developing nuclear power is also a step forward, in conjunction with offering international waste management services including storage of spent nuclear reactor fuel.

Key adaptation initiatives include top priority for negotiation of transboundary agreements for water sharing; active development and deployment of genetically modified crops (GMOs), particularly drought resistant wheat for planting in northern, non-irrigated areas; expansion of protected reserves for biodiversity; and establishment of a regional seed and tissue bank to preserve species DNA.

\*This points are drawn from "Toward a Green Growth Path," a chapter in "Kazakhstan 2050: Toward a Modern Society for All". Oxford University Press. February 2014. The chapter was written by Dr. Brown when he was a nonresident Senior Fellow at the Brookings Institution.

#### Kamiljon Akramov, of the International Food Policy Research Institute, spoke on the agricultural transformation and food security challenges across Central Asia.

Food security is a cross-sectoral problem and requires multisector solutions. Modern approaches to the problem emphasize the importance of food security at the national level as well as at the household and individual levels. The final objective is for all households and individuals to have reliable and sustainable access to nutritious and healthy food. This can be achieved by mixing macro, sectoral and micro-level policy instruments including stabilization of food prices and safety net mechanisms to poor households. Most importantly, in regions such as Central Asia, where majority of population still live in rural areas and depend on agriculture, efforts to raise agricultural productivity may have significant impact on food security. Raising agricultural productivity is necessary to achieve both agricultural and structural transformation, which involves a falling share of agriculture in gross domestic product and employment.

Evidence suggests that agricultural labor productivity in Central Asian countries did not increase much during the last two decades and gap in labor productivity between agriculture and the rest of the economy became even larger. As a result, share of agriculture in economic output declined significantly, but its share in employment didn't change much. This has important implications for food security as incomes earned in agricultural sector does not increase and significantly fall behind incomes earned in the rest

of the economy. Thus, it is not surprising that despite significant increases in average per capita income during last decade, Central Asian countries still have sizable food insecure people and most of them live in rural areas. Overall, stunting rates for children under five—a common measure of malnutrition—remain relatively high in the region: 13 percent in Kazakhstan, 18 percent in Kyrgyzstan, nearly 20 percent in Uzbekistan, and 39 percent in Tajikistan, according to the most recent WHO/UNICEF and World Bank data.

During the last two decades, most Central Asian countries have implemented important agricultural reforms by reducing government involvement in farmers' decision-making, reorganizing farm structures, and liberalizing prices and markets. However, analysis suggests that they still do not have a property rights system that fully rewards individual initiative and toil, and farmers have problems in accessing modern technologies, inputs and lucrative markets. Any effort to stimulate faster agricultural transformation in the region will need to cope with these problems. In addition, policies that stimulate the growth of labor-intensive and employment-creating nonagricultural sectors are needed to absorb surplus labor from agricultural sector.

# Sebastien Peyrouse, of IERES at The George Washington University, followed by addressing the issue of food security in Kazakhstan and the role of this republic in the regional food trade.

Kazakhstan has several assets in terms of agriculture and development, has been an important cereal producer, and food access is much higher there than in the other Central Asia republics. However, food security is still facing several challenges:

Assuming that an increase of GDP will mechanically ensure better food security is a partly false statement: food security mainly affects the pauperized populations for which per capita GDP does not increase at the same rate as national GDP. Household income devoted to food is still high: 42 percent (between 15 and 30 percent in developed countries). The main problem is less the quantity of food people have access to than people purchasing power distribution, and ac-

cess to food for all groups within the populations, whatever their social or geographic origins. There are strong disparities between urban and rural zones, and between the capital cities and other cities.

Kazakhstan still depends too much on imports and productivity has declined: wheat yields in the region are still substantially below yields in other major grain producing countries in the world. The agricultural installations have degraded, materials that have not been modernized for two decades has profoundly affected agricultural production, and livestock farming has suffered unprecedented decreases. Moreover, tariff fluctuations for material inputs (like fertilizers and insecticides) have considerably limited utilization of the latter.

Kazakhstan's share of the total cereal production of Central Asia averages 60 percent, although it accounts for only 15 percent of the total population of the region. This allows Kazakhstan to act as a wheat basket for neighboring countries and export part of its production. However, the growing importance of Kazakhstan, as a regional wheat suppliers raises concerns about the reliability of their supply and policy responses to weather-related shortfalls, especially if they react to such shortfalls with policies that restrict exports. When world wheat prices spiked during 2006-08, Kazakhstan tried to contain the growth in domestic wheat prices by restricting, or even banning, exports. There is uncertainty surrounding the degree to which Kazakhstan will increase its wheat exports. Export growth requires costly improvements in the infrastructure needed to store, transport, and export grain. Finally, policies that favor expansion in domestic livestock sectors could increase internal demand for feed wheat, reducing the surplus available for trade.

In the last panel, Dejan Kedserovic, of the International Organization for Migration, investigated the migration and development nexus case in Kazakhstan.

Migration and development is an important soft security challenge for Kazakhstan and Central Asia especially given the scale of labor mobility in the region. Recognizing the need for both high and lower-skilled workers, the issue of orderly managed migration, in particular labor migration, is increasingly important in the Central Asian region.

Migration and development are highly interdependent processes. International migration in the development context relates both to people who have chosen to move of their own accord, and forced migrants who can contribute to both their country of resettlement or their country of origin if they are able to return safely. Development, meanwhile, is a dynamic process implying growth, advancement, empowerment and progress, with the goal of increasing human capabilities, enlarging the scope of human choices, and creating a safe and secure environment where citizens can live with dignity and equality. In the development process, it is important that people's productivity, creativity and choices are broadened, and that opportunities are created. Maximizing the positive relationship between migration and development has long been a focus of IOM's work.

Kazakhstan is a country of transit, origin and destination in Central Asia and the wider CIS region at the same time in the ax of South-South migratory movements the corridor "Kazakhstan to Russian Federation, and vice versa" is considered to be a major one. With Kazakhstan's robust economic development continuing in the next years, it is expected that the challenges of complex migration dynamics for both origin and destination countries will increase. Official statistics by the Ministry of Labor and Social Policy of Kazakhstan estimates that close to half a million migrant workers will be needed till 2015. Thus, cooperation frameworks together with polices that are well designed and can respond to labour market needs are necessary for the region to remain competitive and continue to grow. Current migration trends in Central Asia present significant soft security challenge as well as opportunities for development

Marlene Laruelle, of IERES at The George Washington University, wrapped up the event by discussing migration in Kazakhstan, investigating regional opportunities and domestic challenges.

In the short span of just a few years, Kazakhstan has become a unique migration crossroads in Central Asia. After Russia, it has the second-largest intake of migrants from Central Asia. Attracted by its economic dynamism, Uzbek, Kyrgyz, and to a lesser extend Tajik migrants are continuing to grow in number. They are distributed geographically according to their professions, and are very diverse in terms of their social backgrounds and professional qualifications.

For Central Asian migrant workers, Kazakhstan is easily reachable by relatively affordable public transport that allows for maintaining close family links back at home. In addition, the effectiveness of cross-border familial contacts can be reinforced by the presence of Kyrgyz or Uzbek minorities settled on Kazakh territory. Far greater cultural links between Central Asian migrants and Kazakhs, as well as the absence of violent xenophobia in Kazakhstan, also make the country an attractive destination, especially in comparison to Russia. Lastly, the country's liberal legislation governing work-related matters, its developed social infrastructure (including access to medical care and schools for children), and its higher salaries relative to those available in neighboring labor markets are deciding factors for many migrants when choosing Kazakhstan.

The country is undergoing increasing economic differentiation between its regions, and this diversity also emerges with regard to labor migrants. The regions with the largest migrant intake are those with the most developed industrial sectors. They include the Almaty region (especially the Enbekshikazakh district) for tobacco plantations, the Zhambul region for market produce, southern Kazakhstan for cotton, both capital cities (the former one, Almaty, and the new one, Astana) for the construction sector and services, and the western regions (Atyrau and Mangystau) for hydrocarbons.

As Kazakhstan seeks to position itself as a regional leader for the whole of Central Asia, it is aware that its migratory appeal works in its favor. In an address made in February 2008, President Nursultan Nazarbayev pledged that his country would set up a special labor transfer scheme for the countries of the Central Asian region. The Ministry of Labor and Social Welfare

worked closely with the European Union and international organizations such as the International Labor Organization and the International Migration Organization to reform the migrant labor legislation and especially to improve the quota mechanisms and the integration challenges. Kazakhstan's status as the regional leader of Central Asia lies partly in its ability to integrate migrants from neighboring countries.

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