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## Central Asian integration as a way of guaranteeing regional security, economic growth, feasibility and prospects

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**Zentrum für internationale Entwicklung- und Umweltforschung  
Der Justus-Liebig-Universität Gießen**

**Central Asian Integration as a Way of guaranteeing  
Regional Security, Economic Growth, Feasibility and Prospects**

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# **Central Asian integration as a way of guaranteeing regional security, economic growth feasibility and prospects**

## **1. INTRODUCTION**

Post-Soviet Central Asia (CA) includes five countries: Uzbekistan, Kazakhstan, Kyrgyzstan, Turkmenistan and Tajikistan. The CA region covers an area of about four million square kilometers. Its population is over 60 million people of more than 100 different ethnic groups (THE AGENCY OF STATISTICS OF THE REPUBLIC OF KAZAKHSTAN 2009). Therefore, CA can be characterized as an ethnic cauldron. For several reasons, the region is vulnerable to instability and conflicts:

- close proximity to long-time conflict zones (Afghanistan, Pakistan);
- external shocks and pressures;
- ethnic escalations in the past;
- economic difficulties and challenges, the countries have been experiencing ever since gaining independence;
- inter-state disputes in the issues of water resources allocation and demarcation;
- serious environmental problems that countries need to address jointly (e.g. Aral sea, soil erosion);
- scarce water resources combined with arid climate and consistent population growth.

Each of these problems can result in a sudden surge of violence. Together, they represent a quite explosive mixture (GOVERNMENTAL INTERNET-PORTAL OF KYRGYZSTAN 2009; STATE STATISTICAL COMMITTEE OF TAJIKISTAN 2009; THE EMBASSY OF TURKMENISTAN IN THE USA 2009; STATE COMMITTEE OF THE REPUBLIC OF UZBEKISTAN ON STATISTICS 2009).

The history of CA is rich and diverse in turning points. The region witnessed the rising of empires which stretched far beyond its boundaries and conquered territories of contemporary Russia, Iran, China and Turkey. On the other side, the region itself has been conquered and divided. Halford Mackinder, British founder of geopolitical theory, even described the region as “the heartland of history”. He authored the statement: “Who controls Central Asia controls the world”. The same can be said about today’s state of affairs in CA. The region has become a battlefield of geopolitical confrontations. The interests of superpowers such as the USA, Russia, and increasingly China, intersect in CA (RUMER, BORIS 2002, P 57). In addition, the economic situation of CA remains unrewarding. Economic reforms are carried out slow and have not been effective so far. This situation is resulting in hardships for the population and provides a basis for radical outlooks as well as escalations of antagonism. Burning issues such as water resources distribution and delimitation of state borders can be seen as a “legacy” of the former Soviet era. Since leading to significant disputes, they complicate even more the situation in the region.

During the last decade, a number of inter-ethnic clashes have been witnessed in the CA region. However, these conflicts are not on a large scale. At times, other problems entail a much higher conflict potential. Politicians from Central Asian countries exchanged mutual accusations over the misuse of water resources or territorial disputes. These controversies about water resources allocation and delimitation lead to inter-state tensions. Another lowering conflict might be that some political leaders even tried to win over their electorates by propagate nationalistic ideas. Those conflicts might spread far beyond the region boundaries. The integration of the Central Asian states would be an effective way to eliminate the threat of rising conflicts. The integration of CA can end ethnic and inter-state tensions and will provide a unified force to fight environmental problems. Furthermore, it might be an efficient way to overcome hostile nationalism as well as to prevent confrontations of this character. Hence, integration is an effective way to guarantee peace in the region. The unification of Central Asian states will also lead to larger markets in the region. This will intensified competition and encourage economic growth, higher productivity, and improved standards of living. The use of scarce but vital and strategic resources such as water will also be harmonized in an integrated CA.

## 2. GEOPOLITICAL SITUATION OF CENTRAL ASIAN STATES

A close proximity to hot spots like Afghanistan, Pakistan, and Iran as well as a striking distance to China and Russia are significant geo-strategic characteristics of CA. Furthermore, the deposit of substantial natural resources and the potential of becoming one of the major transportation arteries between the west (Europe) and east (Asia) get CA into an important geo-strategic position. At the same time, the region is undergoing wide-ranging transformation processes. Its former centrally-planned economy is changing into a market economy and its population is growing rapidly.

**Uzbekistan** is the most populous CA state and the third most populous in the former Soviet Union. The country borders on Afghanistan in the south, Turkmenistan in the southwest, Kazakhstan in the west and north, and Kyrgyzstan and Tajikistan in the east. Uzbekistan is one of the two double-landlocked countries<sup>1</sup> worldwide. Its capital Tashkent is located in the east. The total territory of the state covers an area of about 448,900 km<sup>2</sup>. This makes Uzbekistan the fifty-fifth biggest country in the world. Its population is about 27.8 million. Uzbekistan is a multicultural country with more than 100 ethnic groups. Over 70% of the population are Uzbeks (STATE COMMITTEE OF THE REPUBLIC OF UZBEKISTAN ON STATISTICS 2009). The biggest minorities are Tajiks, Kyrgyzs, Kazakhs, and Russians. Major spoken language is Uzbek, which belongs to the Turkic language family. Like other countries of

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<sup>1</sup> Double-landlocked countries are surrounded by other landlocked countries. Lichtenstein and Uzbekistan are the only countries in the world which are double-landlocked.

Central Asia, Uzbekistan is characterized by a young population with a significant percentage of the population at working age. The age group below 25 years contributes to 54.1% of the total population. The age group of 25 to 59 years contributes to 40.1% of the total population. The proportion of people at the age of 60 years and above is 5.8% (UNDP 2009). Its central location and the fact that the country has the biggest population in the region make Uzbekistan the most important and influential state in CA. Proceedings in this country will most likely considerably affect the whole region. Uzbekistan's economy is still mainly based on agriculture and natural resources. The country is among the largest cotton producers and exporters in the world. Moreover, the land is rich in natural resources such as gold, natural gas, oil, silver, coal, and copper.

**Kazakhstan** is the ninth largest country in the world. Its territory equals 2,724,900 km<sup>2</sup>. Kazakhstan has an estimated population of about 15.82 million people. The population density is 5.8 persons per km<sup>2</sup> (THE AGENCY OF STATISTICS OF THE REPUBLIC OF KAZAKHSTAN, 2009). Kazakhs are the main ethnic group. The biggest minorities are Russians, Uzbeks, and Ukrainians. Most of the population speaks Kazakh language, which also belongs to the Turkic family of languages. The capital is Astana. Kazakhstan shares borders with China in the east, Kyrgyzstan, Uzbekistan and Turkmenistan in the south, and with the Russian Federation in the north and west. Kazakhstan also borders on a significant part of the Caspian Sea. The country has substantial natural resources potential. It has large reserves of coal, petroleum, copper, iron, lead, zinc, gold, manganese, oil, gas, and uranium. Currently, Kazakhstan is the most developed state in the CA region. Since the economy of the country is mainly based on raw materials, this advance in development is mainly due to exportation of natural resources rather than of industrial development.

**Kyrgyzstan** is a mountainous landlocked country. It is bordered by Kazakhstan in the north, Uzbekistan in the west, Tajikistan in the southwest and China in the east. The capital of the country is Bishkek. According to official statistics, the population of the country is about five million inhabitants. Kyrgyzs amount for 67.4% of the population, 14.2% of the population are Uzbeks and 10.3% are Russians. The country covers an area of about 198,500 km<sup>2</sup> (GOVERNMENTAL INTERNET-PORTAL OF KYRGYZSTAN 2009). Kyrgyz, which also belongs to the Turkic family of languages, is the mainly spoken language. Agriculture plays a decisive role in the economy of Kyrgyzstan. Livestock raising is the major agricultural activity. Main crops are wheat, sugar beets, potatoes, cotton, tobacco, vegetables, and fruit. Processing of agricultural products is a key component of the industrial sector. Kyrgyzstan is rich in mineral resources and possesses substantial deposits of coal, gold, uranium, antimony, and other valuable metals. The country's plentiful water resources and mountainous terrain facilitate the production and export of large quantities of hydroelectric energy. Nevertheless, this potential is largely underused.

Like Kyrgyzstan, **Tajikistan** as well is a mountainous landlocked country. It borders on Afghanistan in the south, Uzbekistan in the west, Kyrgyzstan in the north, and China in the

east. Tajikistan lies adjacent to Pakistan but is separated by the narrow *Wakhan Corridor*. The official language is Tajik, which is similar to Persian. According to official statistical data, the area of the country is about 143,100 km<sup>2</sup>. The population amounts to about 7.2 million people. The population density is 50.4 persons per km<sup>2</sup>. The country is little urbanized. The main part, 73.7% of the total population, lives in rural areas. The share of the urban population amounts to 26.3% (STATE STATISTICAL COMMITTEE OF TAJIKISTAN 2009). The main ethnic group are Tajiks. Furthermore, a sizable minority of Uzbeks and a small population of Russians exist. Most of the country's territory (93%) is occupied by mountains. The highest mountain, with an altitude of 7,495 meters, is the *Somoni's Peak*. Tajikistan suffered from a devastating civil war which lasted from 1992 to 1997. The primary sources of income in the country are cotton growing and aluminum production. Tajikistan has substantial hydropower potential and started focusing on attracting foreign investments to this sector. The country is home to the hydroelectric power station *Nurek* with the highest dam in the world. There are a number of other projects of power plants which are currently at development stage.

**Turkmenistan** is located on the eastern shore of the *Caspian Sea*. It borders Iran in the south, Afghanistan in the south and east, and Kazakhstan and Uzbekistan in the north. Turkmenistan occupies 488,100 km<sup>2</sup>. The *Kara-Kum* desert comprises 80% of the country's total area. Turkmenistan's population is estimated at 5,000,000 people. Turkmen (85%) form the ethnic majority of the population. Other sizeable minorities are Uzbeks (7%) and Russians (5%). Smaller minorities include Kazakhs, Azeris, Armenians, Ukrainians, Balochis, Koreans, and Tatars (THE EMBASSY OF TURKMENISTAN IN THE USA 2009). Official language is Turkmen which belongs to the Turkic family of languages. Since nearly half of the country's irrigated land is planted with cotton Turkmenistan is one of the leading world cotton exporters. It also possesses very large gas and oil reserves.

As can be seen in the presented country information, the ethnic and cultural composition of the CA region is very diverse. All countries are secular states and the predominant religion in the region is Islam. Christianity (Orthodoxy) is the second most widespread religion. There are also followers of Buddhism, Judaism and other religions. The Russian language is still widely spoken in all CA countries. Though, young people more and more prefer to learn English, German, French or Japanese. The literacy rate is quite high in CA countries, mostly above 90%. The economies of all countries in the region are weak, even though, to different extents. CA countries are depending on imports of consumer goods. Their economies are built on the agricultural sector as well as exportation of natural resources. The economical focus on agriculture was established during the Soviet era. Back then, cotton monoculture was implemented in most CA republics. Another economical priority was on the production of raw materials. Mineral and energy products, though extracted in CA countries, were mainly used in industries elsewhere in the USSR.

The history of the Central Asian region goes back a long way. For thousands of years, Central Asia has been crossroads of great ancient world civilizations such as Greek, Persian,



Indian, Chinese and Islamic. The greater part of Central Asia was conquered by Russia in the 1860s (HUNTER 1996, P 3). During the last century, Russian and British empires competed for an expansion into the region. Later on, the region was incorporated into the Soviet Union. After that, Central Asian republics were completely cut off from the rest of the world including neighboring countries. The only opportunity for external contacts was via Moscow, the center of the USSR (HUNTER 1996, P 89). During the reformation period in the USSR in the late 1980s, independence movements in CA were rather weak (PEIMANI 2002, P 8; CUNNINGGS 2002, P 1; SOUCEK 2000, P 275). Therefore, CA states were not ready for independence when the Soviet Union collapsed. The whole region was suddenly confronted by a host of difficulties and had to face numerous challenges. For example, the establishment of own foreign policies which included establishing external contacts, balancing interests of outside powers, and coping with outside pressures. After many years of isolation, this has been one of the major challenges. The newly independent states are vulnerable to outside political shocks. The war in Afghanistan, the instability of Pakistan and the Iran-US conflict are examples. The biggest influence, though, diminishing as time passes by, comes from Russia, since the Russian Federation has been trying to reestablish its former influence on CA.

CA's history as an arena for rivalry of superpowers has a huge impact on today's state of affairs. Past still contributes to the shaping of foreign policy in Central Asian states. Since the break-up of the Soviet Union, major powers interested in the CA region are Russia, the USA, and China. Turkey, Iran, and Saudi Arabia are also among key players. In general, the European Union (EU) is not very active. Some individual countries, like Germany and France, are involved in various (mainly economic) projects in the region. The main interest of CA countries is to focus on collaboration with the EU. Simultaneously, the interests of other key players in the CA region have to be considered.

### **3. CHALLENGES AND THREATS**

Nowadays, Central Asian states are facing a constellation of grave challenges. Some either present or might present a serious threat for intra-state and even regional security in near future. Most likely, none of the CA countries will be able to overcome the resulting difficulties on their own. In some cases, integration will automatically solve existing problems. For example, increasing economic growth by removed trade barriers and improved transport infrastructure. Furthermore, integration will help CA states to act as a unified force and enhance the chances of achieving desired outcomes.

#### **3.1 Energy Factor**

Abundance of natural resources attracts attention of principal super powers as well as regional actors. All of them pursue their own interests and competing for an influencing

position in CA. None CA state has a sufficient political or economical position to be taken seriously. Thus, every single CA state is extremely vulnerable to outside forces. As one unity, CA will gain authority in world political affairs and will become capable in contributing to security and stability on the Asian continent.

The *Caspian Sea* region (CSR) has become one of the most strategic and important areas. Severe competition for securing substantial natural resources can be observed in this region. The *Caspian Sea* has a length of 700 miles and is located between Azerbaijan, Iran, Kazakhstan, Russia, and Turkmenistan (GELB 2006, P 1). According to the estimates of the *British Petroleum and Energy Information Administration of the US Department of Energy*, the CSR is a significant supplier of crude oil. The oil reserves of the CSR comprise proved reserves of 47.5 billions of barrels and, additionally, possible reserves of 184 billions of barrels. Gas reserves equal 257 trillion cubic feet of proven reserves and, additionally, 293 trillion cubic feet of possible reserves (GELB 2006, P 3). Among the five countries along the coastline of the *Caspian Sea*, two are situated in CA. Before the break-up, only the Soviet Union was sharing the *Caspian Sea* with Iran. Since only two players were involved back then, there was not a dispute on resources allocation. Nowadays, circumstances have become much more complex. The CSR has attracted multiple players with multiple interests and opinions about sharing the resources. Since the *Baku-Tbilisi-Ceyhan* oil pipeline was constructed, Azerbaijan takes a special position in the debate over resources distribution. The country stands apart from the other four littoral states which are not involved in this pipeline project. The pipeline completely bypasses Russia. Thus, it is out of reach of direct Russian influence. This is particularly important for European states, especially, in the light of the current dependency on Russia's energy supplies. Therefore, countries like the USA, China, and European states as well as multinational corporations, express a great interest in the natural resources of the CSR. In future, the CSR might play an important role in ensuring alternative routes of energy supply, independent of Russia's influence. The interest of western powers in energy resources of the CSR region is even more fueled by Iran's presence. Iran possesses the fifth largest proven oil reserves in the world. Russia has also been quite active attempting to secure a dominant role in natural resources distribution. Russia's activities include a joint partnership of Russia and Kazakhstan, represented by the *Tengiz-Novorossiysk* pipeline. The pipeline connects western Kazakhstan with the Russian port of Novorossiysk, located in the *Black Sea*. Russia also has signed oil transit agreements with Kazakhstan. Turkmenistan has a leading position in natural gas production and exportation in the CA region. The country also possesses substantial oil reserves.

Due to its gas and oil resources, CA might play an important role in ensuring stable and balanced energy supply as well as energy transportation to Europe and China. Nowadays, more than 80% of the global energy needs are provided by fossil fuels like oil, gas, and coal (TRIPATHI/SHARMA 2005). The world reserves of these fuels are scarce and alternative sources of energy are very limited. The global proven oil reserves are estimated to last for around 40-60 years. Gas reserves will probably last for about 100 years (TRIPATHI/SHARMA

2005). These estimates are based on the world's current level of production. However, many specialists predict a significant increase in production within the next few years. Main reason for this development is a rapid industrialization of densely-populated countries like China and India. This trend will even more increase the world demand for oil and gas. Therefore, energy security has become a vital issue for many nations, especially, for those which depend heavily on imported gas and oil. Not all energy security threats will necessarily materialize. However, the ongoing depletion of oil and gas resources clearly demonstrates that the world will face a major challenge in near future. Short- and medium-term, oil and gas remain the major energy sources. The situation is aggravated by the fact that most oil and gas reserves are located in such parts of the world characterized by high conflict potential and political instability (EIA 2009). Moreover, some countries, which are rich in energy resources, use energy supply as a political tool to further their own strategic interests.

Currently, 40% of the EU gas imports come from Russia. This fact raised the issue of an excessive dependence on the EU's energy supply from Russia. Therefore, the European Commission considered the diversification of energy-supply sources as priority in its energy policy package, published in January 2007. Since, according to analysis, 4 to 5% of the global oil and gas reserves are located in the CSR and CA region, they play an important role in the Commission's diversification plans. Until now, the EU countries import gas from CA and the CSR mainly via Russia. *Gazprom*, Russia's state-controlled giant gas company has a monopoly on all gas pipelines through which gas from CA countries is imported. Whether CA states neither CSR states are capable of initiating alternative export routes. Furthermore, none of the countries has the political power. This situation gives Russia a privileged negotiating position with these states, especially, regarding the price. Thus, the EU will also benefit CA integration, since it opens various possibilities of accessing CA and CSR energy without relying on Russia. Some analysts are skeptical about the idea of accessing CA and CSR energy resources. These would be insignificant taking into account the EU's overall energy needs and the fact that EU countries would still have to buy gas from Russia. Otherwise, the existence of an alternative supply route would strengthen the EU's position in negotiations with Russia.

### **3.2 Issue of Trade and Transport Infrastructure**

The structure of former Soviet Union's economy system was constructed so that every single republic, with few exceptions, was depending on other republics industry and agriculture. The economic efficiency of this system was not taken into account. For example, cotton was grown in Uzbekistan but was mainly processed in other republics. Another example is that Uzbekistan's heavy-industry was depending on raw materials from Russia and Ukraine. After the collapse of the USSR, the disruption of supplier-producer ties and newly established trade barriers in forms of tariffs and custom duties hit the economies of the newly independent states hard. At first, this led to a sharp decline of industrial production followed

by economic worsening (ZHUKOV 1996, P 106) and finally resulted in social instability, ethnic conflicts, and radicalization. This echo of the given economic shock can still be felt in CA.

Integration of CA states will significantly simplify the resolution of economic problems due to improved transport infrastructures and improved availability of raw materials for regional industries. Taken under consideration that CA represents a vast landlocked region of Asia, integration will reduce the economic isolation of the region through improved transport infrastructure within CA, and to other parts of the world. As even the *Caspian Sea* is in fact a very large lake, trade turnover is significantly hampered (HUNTER 1996, P 124). Lack of access to seas has also complicated the political task of developing new relations with the outside world. Integrated CA states would have better chances of establishing mutually beneficial cooperation with those neighbors who can provide access to global water transport infrastructure. Moreover, due to its strategic location, the region itself will become an attractive thruway between East and West. Therefore, the internal trade and transport barriers should be eliminated.

Integration will lead to a harmonization of economic policies and will as well remove trade barriers. Furthermore, integration will boost intra-regional and external trade and simplify the movement of capital and labor resources. Air corridors from different parts of CA to countries of South East Asia via China will increase the freight flow from Asia to Europe. A railway track line between Kazakhstan and China will open access to sea ports in China for Central Asia and can be used for worldwide trade. Access to sea ports is very important for landlocked countries. Thus, integration will expand transportation options for Central Asia and will provide considerable advantages to foreign economic activities. This is particularly beneficial for Kyrgyzstan and Tajikistan, both mountainous countries with difficult access.

### **3.3 Environment and Ecology: Aral Sea Disaster**

Some CA states, namely Uzbekistan and Kazakhstan, are facing a grave environmental problem. It is called the *Aral Sea* problem and can be classified as a global problem without exaggeration. The *Aral Sea* is a landlocked lake in CA. In the beginning of the 1960s, it was the fourth largest lake in the world. However, by 2004 the sea had lost three fourth of its original area, respectively, 91% of its water volume (GIESE 2004, P 143). From 1960 to 2003, the sea level dropped by approximately 16 meters (JALLING 2003, P 170). Today, the *Aral Sea* is divided into separate bodies of water. The shrinking of the *Aral Sea* has had a devastating impact on the ecology as well as the social and economic systems established in the deltas of the lake. The diminished size and increased salinity of the lake caused a sharp decline in biodiversity of flora and fauna. The consequences were so severe that the *Aral Sea* region was declared a world disaster zone in 1992 (GIESE 2004, P 144). Another immediate consequence was the disappearance of tourism and fishing industries. The following high unemployment rate resulted in massive migration as in some areas it became practically impossible to live. Major affected areas became deserted. Moreover, the dwindling lake has

caused polluting dust and salt storms. They do not only affect the health of the inhabitants of the *Aral Sea* deltas but also communities situated throughout the region of the basin.

The Soviet political system with its rigid centrally-planned economy was the main causes of substantial environmental degradation in CA. The command-style of the political governing and its decision-making lead to a giant gap between the ruling system in Moscow and everyday life conditions in other parts of the Soviet Union (JALLING 2003, P 167). This was particularly true for CA. There existed no independent political and legal entity capable of or willing to correct sick-making policies or decisions. Furthermore, soil erosion, salinification, and decrease and pollution of water supply and soil due to the overuse of pesticides were ignored and exacerbated environmental degradation. Unlike in democratic states, the Soviet ruling system could not be held accountable. Channels through which criticism and alternative views could be articulated were absent (JALLING 2003, P 167). This led to further environmentally disastrous practices over a long period of time. As a result, the region suffered so heavily environmental damage that it is an ecological disaster by now. Even until today, the economic infrastructure developed during the Soviet era impedes efforts to secure ecological preservation. Therefore, it is highly doubtful that any CA state on its own will be capable of resolving the fundamental environmental problems.

### **3.4 Drug-Trafficking**

One of the biggest challenges of CA states, with the need for a common approach, is drug-trafficking from Afghanistan. Three out of five countries in the region, Tajikistan, Turkmenistan, and Uzbekistan, share borders with Afghanistan. These countries have long become transit points since they are located between areas of production and use. During 1998 to 1999, drug-trafficking increased by 250% in Tajikistan. According to data of the Ministry of Internal Affairs, illicit drug seizure rocketed by staggering 1600% in Kyrgyzstan. Uzbekistan is in a similar position. Kyrgyzstan and Kazakhstan proved to be not immune to this “virus”. They are used as transit points, even though they do not have a common border with Afghanistan. Through CA states, drugs are channeled to China, Russia, and further to Western countries. Despite American military presence in Afghanistan, drug trafficking from this country to CA and Russia increased 4.5 times from 2001 to 2004. Moreover, drug production has been rising. According to experts, there are laboratories for narcotics production on the territories of the CA countries (MOHAPATRA 2007, P 160-161). Drug-trafficking represents significant threats on governmental as well as on societal level. Especially, the trend towards more powerful drugs, which pose a much more devastating effect on human mind and body, has to be taken into account. Only with unified force it will be possible to withstand to this grand threat.

### 3.5 Water Resources: Inter-State Disputes

Struggle for resources among CA countries may impede unification processes, if CA countries are still disintegrated. Furthermore, inter-state disputes and inter-ethnic tensions heighten. The problem of water resources allocation might serve as an example here. Theoretically Central Asian countries can be divided into two groups.

Among the first group are Kyrgyzstan and Tajikistan. Both countries have considerable water resources and scarce hydrocarbon resources. Heads of rivers of the CA region are located in these countries. Kyrgyzstan has one of the highest availabilities of drinking subsurface water per head worldwide. Kyrgyzstan is the only country in CA, whose water resources almost fully originate within its own territory. Due to the scarcity of energy resources, development of hydro-power engineering is vital for this country. Uzbekistan, Kazakhstan, Russia, and China import hydropower from Kyrgyzstan. According to estimates of experts, the hydroelectric potential of Kyrgyzstan is currently utilized for only about 8 to 9%. The hydro-electric engineering sector as well has huge potential for development in Tajikistan. Currently, Tajikistan and Kyrgyzstan contribute for around 70% and 21%, respectively, of hydro-electric potential of CA (KURTOV 2005).

The second group includes countries with sizable hydrocarbon resources and scarce water resources: Kazakhstan, Turkmenistan, and Uzbekistan. In CA, 90% of agricultural output is grown in irrigated land. Therefore, water is crucial for economies of this group. Due to specific soil and climate conditions, Uzbekistan needs substantial volumes of water for agricultural needs during the whole vegetation period. In Kazakhstan, 75% of available water is used for agricultural needs. Moreover, since Kazakhstan is situated in a zone of insufficient moistening, the country constantly suffers scarcity of drinking water. For a long time, water use has exceeded natural water replenishment in the country. Kazakhstan's water needs are met to 56% from its own sources (KURTOV 2005). The rest, around 44% of surface water, comes from neighboring countries. Experts argue that water shortage might become a serious threat for sustainable development in Kazakhstan.

As a source of water conflicts, following reasons may be considered. Regional rivers are not deep and full-flowing in the CA region. To ensure uninterrupted functioning of hydroelectric power stations, for instance in Kyrgyzstan, a strict water resources management needs to be maintained. Especially, during summer, water needs to be saved and accumulated in water reservoirs for electricity production during winter. Countries of the second group mainly need water during harvesting time. Thus, countries of the first and second group have conflicting interests. The following factor might further aggravate the situation. According to scientists, the glaciated area in Kyrgyzstan is currently steadily reducing. They estimate that the glaciated area of the country will have declined by 30-40% in 2025. This will sharply reduce the water resources by around 25-35% (KURTOV 2005). The fact that Kyrgyzstan and Tajikistan do need less water for their industries and agriculture compared to other CA states is another source of inter-state tensions. This is a very serious problem, as the issue of water

supply is vital for the countries of the second group. One of the few positive aspects of the former centrally-planned economy in the CA region was that water allocation decisions were in the hand of a single entity, the Ministry of Water Industry. After the collapse of the USSR, this common mechanism no longer existed and all CA countries are deciding by themselves about water distribution. Even though, in 1992, these countries reached an agreement to keep the former regime of water resource management, in reality, each country pursued its own water management policy. If the conflicting situation gets aggravated, the risk that water conflicts might convert to inter-ethnic and/or inter-state conflicts might emerge.

Integration of the CA states will make it feasible to reach a pleasing solution for all. Water resources allocation and management will be harmonized, as there will be a single institution which will deal with the issue, considering all necessary nuances.

### **3.6 Border Delimitation**

Currently, the most burning issues in the CA region are border lines and delimitation. The border lines of CA are “Soviet legacy” and, in essence, are artificial. During the long pre-Soviet history of CA, states were never divided according to ethno-national principles and the region was not governed according to ethnic or national criteria. For centuries, the region has been multi-ethnic as well as multi-lingual. Peaceful coexistence of various communities was a norm. In 1924, the Soviets demarcated “national” boundaries and created contemporary, though highly artificial, border lines (EVERETT-HEATH 2003). Historically, there was only one big division in CA. This was between the civilizations of the steppe lands in the north, with nomadic culture, and the civilizations of the oases in the south, with settled culture (NAUMKIN 1994, P 3). Other differences, such as linguistic or ethnic, were not determinants of state frontiers. The Soviets pretty much arbitrarily demarcated borderlines between CA republics. Historical and geographical factors were not taken into consideration. Nowadays, the unresolved issue of delimitation and demarcation of state borders poses a certain degree of political instability in the CA region. Furthermore, this is causing tensions in inter-state relations. Epicenter of instability is the *Ferghana Valley*. It includes territories of Kyrgyzstan, Tajikistan, and Uzbekistan. The valley covers the most disputed parts of the state borders. The *Ferghana Valley*, with a population of over 12 million people, is the most densely populated area in CA. Thus, any conflict there is potentially highly explosive. Due to the valley’s central location any occurring instability might spread to other parts of the CA region. The situation is aggravated by the fact that ethnic minorities make up significant proportions of Kyrgyzstan’s, Tajikistan’s, and Uzbekistan’s population. In some cases, these ethnics occur to be a majority in particular districts of the *Ferghana Valley*. For example, Kyrgyzstan has two Uzbek enclaves and Uzbekistan also has Kyrgyz enclaves. A similar case can be observed between Tajikistan and Kyrgyzstan. On the one hand, about one fourth of the population in Tajikistan are Uzbeks. On the other hand, there is a very large number of Tajiks living in Uzbekistan. This situation is a high risk for inter-ethnic conflicts which can easily

transform into inter-state ones. Not long ago, Kazakhstan also had to deal with delimitation issues with Kyrgyzstan and Uzbekistan.

Integration of CA states will provide a friendlier framework for resolving existing territorial disputes. It will eliminate the threat of military conflicts and accelerate the process of disputed settlement. Moreover, borders with external countries will be better secured with joint efforts.

#### **4. Regional Integration: Why and How**

Since progressive economic integration will pave the way for the ultimate objective, the political union, integration of CA should be carried out gradually. The process should stepwise incorporate diverse economic sectors. Supranational institutions, capable of working out optimal strategies and equipped with sufficient political power to enforce them, have to be established. For unification, a necessary normative base should be worked out and adopted. The experience of European states should be analyzed. Europe's inability to prevent and resolve antagonisms during the beginning of the 20<sup>th</sup> century led to World War II. Having learned from previous mistakes, architects of the European integration abolished the traditional "zero-sum model", in which one country gains at the expense of the others. Instead, they developed a "surplus-community model", where European states determined common interests, yielded common surplus, and redistributed it back in a fair way. As a result, European states enjoyed continuous growth, political stability and security for decades (SEIDELMANN 2004, P 3). Here, the practice of opt-outs and give-and-take policy, widely practiced during the initial phases of the European unification for "luring" reluctant nations into the union, will be of substantial interest and use. The fact that the EU format allows each country to keep its uniqueness, thus, eliminating the adverse effects of globalization, is also worth analyzing. The experience of European integration will provide interesting analytical material. It will help to avoid the difficulties European nations encountered and errors they have made. CA states should take historical, social, and cultural peculiarities into consideration.

For the European nations, it took nearly 50 years to unite. In case of CA, there are certain advantages, which, if the experience of the EU is analyzed and necessary lessons are learned, might make the integration process proceed much faster and easier:

- much smaller number of participants;
- similarity of mentalities and cultures;
- proximity to each other (many countries have common borders);
- absence of big gap in the development level (ability of the less developed countries to catch up with the more-developed ones in relatively short period of time).

The fact that all respective states were part of one country for more than 70 years could be another facilitating factor. Even though there have been local ethnic clashes, CA countries



avoided inter-state conflicts as it happened, for instance, in Caucasus (HUNTER 1996, P 165). Thus, peoples' perception of integration is rather positive. It offers a range of advantages, including but not limiting to improved trade opportunities and easier labor and capital mobility. Compared with Caucasus, which is torn by ethnic clashes and significant territorial disputes, CA has certain inclinations towards integration and a better prospective for it (NAUMKIN 1994, P 201). Integration will end disputes over distribution of land and water resources. It will provide necessary prerequisites for harmonization of resources allocation.

The progress of integration in CA depends very much on democratization processes in the respective countries. Every CA ethnicity is represented in each CA state. Therefore, interconnected cultural cognation will serve as an underlying factor for integration. The possibility to achieve faster and greater economic growth due to removed trade barriers and intensified economic cooperation, will be another motivating factor for unification. Sooner or later, the governments of respective countries will understand the necessity and eventually also the inevitability of regional integration, which is based on the following aspects:

- Economic aspects: There is a high degree of interdependency, particularly in the economic sector and transport infrastructure. Every country has something to offer to others. Uzbekistan, Kazakhstan and Turkmenistan possess energy resources, while Kyrgyzstan and Tajikistan have water resources.
- Political aspects: In general, CA consists of rather small countries surrounded by strong powers such as China, Russia, and Iran. To strengthen CA's position in international political affairs, especially in regional ones with direct impact, integration is vital. Moreover, existence of internal threats (inter-state disputes) as well as external ones (being surrounded by superpowers which might have an imperialistic approach or present theoretical threats, proximity of conflict zones) will have an accelerating impact on unification. As given the existence of potential threats, regionalism becomes a necessity for controlling internal conflict risks and optimizing defence against external dangers (SEIDELMANN 2008, P 41).
- Socio-cultural aspects: Over hundreds of years, some countries have a single state and/or common history. The fact that interaction has been very intensive and people have relatives across borders on massive scale will pose certain positive influence. Last but not least, coexistence in the framework of one country for 70 years is also a factor which should be taken into account.

The formation of a stable and powerful state which borders Afghanistan and Iran is important for securing stability on the Asian continent. Integrated, CA states will be capable of ensuring stabilizing effects to neighboring countries. Otherwise, instability in the CA region could potentially destabilize the continent. This is a particular risk, since four nuclear powers, Russia, China, India, and Pakistan are located on the Asian continent. Integration will also eliminate the threats arising from intra-regional disputes and rivalries. Since the participation of external powers in CA affairs is a likely possibility, this enhances the potential danger to global peace and stability, as in case of conflict, interests of Russia, the USA and China will

clash. Involvement of Turkey and Iran in such conflicts is also highly probable. Last but not least, CA has elicited and will elicit increased attention in the world due to its geo-strategic location and abundant natural resources.

At the end of 1993, only two years after CA states appeared on political maps, the *Economist* predicted that the region would be one of the most unstable parts of the world over the next decade. Nonetheless, despite these daunting predictions, post-Soviet CA has unscathed managed to go through these turbulent times, with the exception of a civil war in Tajikistan. Thus, fears of balkanization of the region have not been realized (RUMER 1996, P 273). The countries of the CA region (with the exception of Tajikistan) successfully avoided large scale conflicts. Now, it is time to go further, to secure regional security and ensure economic growth.

Superpowers pursue their own goals in the CA region. Russia seeks CA to be a traditional sphere of influence, while China is interested in the region as a supplier of energy resources. For the United States, the region is of strategic importance. CA might be the territory from where the US can control and influence the situation in Afghanistan, Pakistan, and Iran. None of the superpowers is interested in a powerful centralized state in CA. At the same time they all fear another conflict zone in this part of Asia. Russia and China are wary of having unstable and explosive territories next to their frontiers. The USA are a proponent of stability in CA, since they have trouble dealing with the situation in Afghanistan. Therefore, CA states have external support for ensuring stability. This creates a favorable environment for integration. Up till now, superpowers managed to maintain the status quo in CA. Nevertheless, it is hardly possible to predict whether their interests converge or conflict in the future. In order to stop being a battleground of interests of outside players, integration is in the interest of CA states themselves. They want to start shaping their own foreign policy and stultify their high susceptibility to outside influences and shocks. Integrated CA will have better chances to stop being a chessboard where interests of external actors are at play.

## **5 CONCLUSION**

Nowadays, CA countries are facing serious challenges. Their industries are slowly recovering from the disruption of “supplier-producer” ties among former Soviet republics and East European states. The transformation from centrally-planned economies into market oriented ones requires absolute reconsideration of political and economic values. The focus towards industrialization has been implemented. For instance, Uzbekistan is among the very few former USSR countries which have developed motor-car and aircraft industries. The textile industry is another sector which is currently experiencing a boom. Expansion of Turkish and South Korean businesses and inflow of substantial investments from these countries can be observed currently in several CA states. Financial inflows from these

countries are directed towards motor-car and textile industries as well as hotel and tourist infrastructure.

CA is a potentially good area for foreign investors. Besides the industrial sector, the financial sphere is another field where fruitful collaboration with foreign countries could take place. The financial system in most CA states is still restructuring and developing. Significant human resources and comparatively much lower wage rates and costs of production make CA attractive for investing. In order to attract foreign investments, a number of preconditions have to be met:

- Political stability and security must be achieved;
- Trade barriers should be removed;
- Transportation infrastructure within the region needs to be improved.

Achieving these points implies integration!

Integrated CA is more likely to be able to cope with challenges of today's insecure world. Moreover, integrated CA has better chances to assert its claims and interests, especially, CSR resources distribution, balancing interests of superpowers, and confronting external shocks and pressures. Adjacent to Russia, China, Iran, and Afghanistan, integrated CA states will be equipped with additional policy options due to its extremely important strategic location and geopolitical influence.

Nowadays, the population of CA exceeds 60 million inhabitants. Abolishment of trade and tariff barriers will simplify labor mobility and free flow of capital. Since it represents vast markets, the region will be an extremely favorable environment for growth. Industries of consumer goods will have a boost. With influx of investments, textile and food industries, which are currently largely underdeveloped, will experience a continuous boom. Furthermore, these sectors also have considerable export potential, since, raw materials necessary for these industries are locally abundant. Over time, the abundance of cheaper labor resources will be a competitive advantage of CA industries compared to foreign producers. This might become the locomotive of integrated CA economy and will have profound effects, economic as well as social. The demographic profile of the CA area is unique with a high proportion of young people. Here, industrial development is crucial for eliminating the unemployment problem. Besides rich energy resources, the CA region also has plentiful ways to transport them, thanks to its strategic location: to China, to the sea (through Iran), to Turkey (through Caucasian states) and to Russia. This will make the region extremely important and powerful.

The source of inter-ethnic conflicts is mainly rooted in social and economic hardships. Mostly, ethnic conflicts occur between indigenous populations and minorities. Sometimes, they are fueled by political reasons and inter-state disputes. Integration implies dissolution of such disputes. In fact, even historical evidence supports these ideas. During the Soviet period, all CA republics were part of single country. Back then, ethnic clashes were far less

frequent than in the last 20 years. Between CA states, competition for the leadership in the region can be observed at present. This is a destabilizing factor, since outside powers frequently take advantage of such inter-state disagreements. Integration will prevent these trends and lead to one single powerful actor instead of several competing states. Some might argue that it is very unlikely for countries with different ethnic composition to integrate and actually the integration will intensify inter-ethnic tensions. But, there are examples of multi-ethnic states, such as Switzerland and Canada, which are quite successful and where various ethnic groups peacefully coexist and form single multi-ethnic society.

One of the biggest fears among nations of CA is that they could lose their sovereignty through integration. They are afraid that one nation will dominate or even suppress the others.<sup>2</sup> Nevertheless, the experience of European nations clearly demonstrated that such a situation can be avoided. Structure and system can be achieved if the principles of equality decision-making and benefits distribution are followed. The uniqueness of the European integration is characterized by the fact that smaller states are enabled to impose significant influence in decision-making and, subsequently, to enjoy significant benefits (Seidelmann 2004, p 3). Another good example would be the USA, where there is no “discrimination” among the states.

The experience of European Union, which clearly demonstrated evident advantages of integration, might serve as an example and stimulus for the unification processes in the CA region in future.

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<sup>2</sup> This has happened, for example, in the USSR where Russia has been a dominant republic.

## REFERENCES

- CUMMINGS, SALLY N. (2002): Introduction: Power and Change in Central Asia. In: Cummings, Sally N. (ed.). *Power and Change in Central Asia*. London: Routledge.
- EIA (2009): World Proved Reserves of Oil and Natural Gas, Most Recent Estimates. US Energy Information Administration. Internet source, call date: 09.12.2009. <http://www.eia.doe.gov/emeu/international/reserves.html>
- EVERETT-HEATH, TOM (2003): *Central Asia: Aspects of Transition*. Routledge/curzon
- GELB, BERNARD A. (2006). *Caspian Oil and Gas: Production and Prospects*. The Library of Congress: CRS Report for Congress.
- GIESE, ERNST (2004): Water Shortage, Water Conflicts and Water Management in Dry Areas of Central Asia (East and West Turkestan). In: Seidelmann, Reimund / Giese, Ernst (eds.). *Cooperation and Conflict Management in Central Asia*. Frankfurt am Main: Peter Lang Verlag, pp. 143-154.
- GOVERNMENTAL INTERNET-PORTAL OF KYRGYZSTAN, call date: 16.03.2009. <http://www.regions.gov.kg/>
- HUNTER, SHIREEN T. (1996): *Central Asia since Independence*. Westport, CT: Greenwood.
- JALLING, LARS (2003):. Environmental Issues in Central Asia: A Source of Hope or Despair. In: Everett-Heath, Tom (ed.). *Central Asia: Aspects of Transition*. New York: Routledge.
- KURTOV, AZHDAR (2005). *Vodnie Konflikty v Tsentralnoy Azii*. Internet source, call date 04.12.2009: <http://www.analitika.org/article.php?story=20050307121605551>
- MOHOPATRA, NALIN K. (2007): Political and Security Challenges in Central Asia: The Drug Trafficking dimension. In: *International Studies*. Vol. 44, No.2, pp. 157-174.
- NAUMKIN, VITALY V. (1994): *Central Asia and Transcaucasia: Ethnicity and Conflict*. Westport, CT: Greenwood Press.
- PEIMANI, HOOMAN (2002): *Failed Transition, Bleak Future? War and Instability in Central Asia and the Caucasus*. Westport, CT: Praeger.
- RUMER, BORIS (1996): *Central Asia in Transition: Dilemmas of Political and Economic Development*. Armonk, NY: M. E. Sharpe.
- RUMER, BORIS (2002): The powers in Central Asia. In: *Survival*. Vol. 44, No. 3, pp. 57-68.
- SEIDELMANN, REIMUND (2004): Regional Peace, Security and Conflict Management: The European Experience. In: Seidelmann, Reimund / Giese, Ernst (eds.). *Cooperation and Conflict Management in Central Asia*. Baden-Baden: Nomos, pp. 1-9.
- SEIDELMANN, REIMUND (2008): EU-Asian Relations in the Context of Globalisation, Regionalisation, and Continued National Sovereignty. In: Seidelmann, Reimund / Vasilache, Andreas (eds.). *European Union and Asia: A Dialogue on Regionalism and Interregional Cooperation*. Frankfurt am Main: Peter Lang Verlag, pp. 31-78.
- SOUCEK, SVAT (2000): *A History of Inner Asia*. Cambridge, England: Cambridge University Press.

- STATE COMMITTEE OF THE REPUBLIC OF UZBEKISTAN ON STATISTICS (2009): Internet source, call date: 16.03.2009. <http://www.stat.uz/STAT/>
- STATE STATISTICAL COMMITTEE OF TAJIKISTAN (2009): Internet source, call date 16.03.2009. <http://www.stat.tj/english/database.htm>
- THE AGENCY OF STATISTICS OF THE REPUBLIC OF KAZAKHSTAN (2009): Internet source, call date: 16.03.2009. <http://www.stat.kz/>
- THE EMBASSY OF TURKMENISTAN IN THE USA (2009): Internet source, call date: 16.03.2009. <http://www.turkmenistanembassy.org/turkmen/gov/gov.html>
- TRIPATHI, SHAILENDRA / SHARMA L. D. (2005): Energy Security to Energy Independence. In: Current Science. Vol. 89, No. 11.
- UNDP (2009): Uzbekistan office and Center for Economic Research in Tashkent: Uzbekistan in Figures. Internet source, call date: 17.08.2009. [www.statistics.uz/](http://www.statistics.uz/)
- ZHUKOV, STANISLAV (1996):. Economic Development in the States of Central Asia. In: Rumer, Boris (ed.). Central Asia in Transition: Dilemmas of Political and Economic Development. Armonk, NY: M. E. Sharpe.

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