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GCRF Challenge Cluster "Fostering Adaptive Governance and Resilience in Local Communities of Central Eurasia: from fragmented pasts to connected futures?"

ENHANCING CONNECTIVITY AND LOCAL COMMUNITIES IN UZBEKISTAN:

building resilient and adaptive governance

Edited by Akram Umarov, Michael Crang and Elena Korosteleva

UK Research and Innovation

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GCRF Cluster “Fostering Adaptive Governance and Resilience in Local Communities of Central Eurasia: From fragmented pasts to connected futures?”

Spanning seven countries across Central Eurasia this Global Challenges Research Fund (GCRF) Challenge Cluster brings together different participatory approaches to sustainable development and inclusive governance from three GCRF projects. This GCRF Challenge Cluster focuses on the themes of fragility, fragmentation, resilience and connectivity in the context of the development of large scale ‘economic corridors’ and transport infrastructures in wake of China’s Belt and Road Initiative (BRI).

By piloting methods from three different GCRF projects this Challenge Cluster examines which participatory methodologies might best serve to create room for local participation and representation in governance with key stakeholders across the region. It explores the different potentials and limits for community engagement via the different participatory methodologies used by the three GCRF projects.

The cluster is exploring how participatory methods open up ways for mapping the discrepancies between projected infrastructure and imagined futures along the ‘economic corridors‘ of Central Eurasia in two case studies (Uzbekistan and Belarus), one at the Eastern end and one at the Western end of Central Eurasia. The methodologies piloted at these two case studies include: citizen juries from COMPASS; mediation forums from the Gobi Mediation Framework and ‘CommuniTea’ participatory mappings practiced in the Resilient Silk Routes Heritage Network and Laajverd’s Visiting Schools. Using material and experiences from these three GCRF projects the GCRF Challenge Cluster runs workshops and events with local stakeholders (NGOs and policy communities) to facilitate discussions about local issues and explores what spaces and processes exist for participatory

governance in Eurasia. From this the GCRF Challenge Cluster is developing a tool kit of approaches to facilitate more adaptive forms of governance that are responsive to local situations.

The international and interdisciplinary research cluster members work across three different domains around state governance, extractive industries and cultural heritage throughout Central Eurasia. The project is led by Durham University (Professor Michael Crang) in partnership with Kent University (Professor Korosteleva and Dr Irina Petrova) and Oxford University (Dr Ariell Ahearn and Dr Troy Stenberg) in the UK, and currently three partners in the region – Laajverd Project (Dr Zahra Hussain), Belarusian State University (Dr Artsiom Nazaranka) and Innovations & Scientific Research Cluster in Tashkent (Dr Mamanbek Reimov and Dr Akram Umarov)

The Global Challenges Research Fund (GCRF) is a £1.5 billion fund that supports cutting-edge research to address challenges faced by developing countries. It is part of the UK's official development assistance (ODA). The fund addresses the United Nations sustainable development goals. It aims to maximise the impact of research and innovation to improve lives and opportunity in the developing world.

Contents

Connectivity and local communities in Uzbekistan: case studies of Angren and Pop district

Akram Umarov*

Abstract: This paper discusses initial findings of the fieldwork conducted in Angren town of Tashkent region and Pop district of Namangan region in August 2021. Angren-Pop railway construction and electrification, its impact on the lives of local communities have been main objects of this research. The paper argues that implications of this infrastructure project implementation have been mixed. People could improve their connectivity with many other parts of Uzbekistan, enhance economic opportunities and revitalize local communities. There is noted, that at the same time, positive effects of this project have not been distributed evenly and could not create long-term economic development without further additional investments, coordination with the implementation of other projects and considering concerns of local communities within these changes.

The intention was to share with you the initial findings and they are still in the stage of deep analysis and research on the collected data. We had a field work in August-September 2021 and it involved four focus group discussions (FGD) in two parts of Uzbekistan. So, the first part was the Pop district of Namangan, the second one was the Angren town of Tashkent region. We have chosen exactly these provinces of Uzbekistan, because they

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are part of the most important and well-known infrastructural project, which was finished in Uzbekistan in the recent years, the famous Angren-Pop railway connection. This railway has a strategic importance for Uzbekistan. As a result, after finishing this project, through the tunnel, which is a part of this railway, we managed to link the Fergana valley of Uzbekistan with the rest parts of the country.

You know, that Fergana valley is famous in expert discussions as an important part of the Central Asia and of Uzbekistan and actually almost the half of the country's population lives there. After the 25 years of independence period in 2016 we managed to complete this railway project with the support of international financial institutions, namely World Bank and involvement of Chinese co-funding, and with the support of Chinese companies. Ferghana valley was eventually connected with the rest of the country. Before there was a railway connection with this part of the country, but it was crossing the territory of Tajikistan and due to complicated nature of our relations this route actually was not used. There was a road, but it was built during Soviet period and there was a big need of direct connection through only Uzbek territory. The aim of the research not just to investigate the Chinese contribution to the connectivity projects in Uzbekistan, but much broader – to understand how globalization processes are affecting the lives of local communities.

In fact, Angren is not only a connecting point, but also one of famous manufacturing centres of Uzbekistan. Angren was founded in 1946 after the unification of the villages that grew up because of the coal mining industry development in this area[2]. In the 1950-60s, the town experienced a phase of rapid growth, overgrew with streets, squares and multistorey buildings. Later in the 1970-80s, the town turned into a significant industrial centre of

[2] The Editors of Encyclopedia Britannica (2022). 'Angren'. Published in 2022. https://www.britannica.com/place/Angren

Uzbekistan. In addition to the main city-forming enterprise, a coalmine, dozens of factories producing cement, asphalt concrete, reinforced concrete structures, chemical-metallurgical and few other manufacturing facilities were built. Two significant power plants for the energy system of Uzbekistan - Angren and Novoangrenskaya TPPs - are also located in Angren.

And for many years, especially in Soviet period it was one of the most developed small towns of Uzbekistan. However, the dissolution of the Soviet Union severely affected the production facilities in Angren. Because of the disruption of the maintained relations with factories in other parts of the country, in a short period most of these plants had to stop working. This decline in production led to the serious downturn and outflow of the part of the population. The situation started to improve after the adoption of the presidential decree on establishment of the 'Angren' free economic zone and logistical centre, directly connecting the populous Ferghana valley with Tashkent region and other parts of the country.

Major breakthrough was made after completion of the construction of Angren-Pop railway in 2016. While out of 1.9 billion USD total cost of the project about 1.5 billion USD was funded by the Uzbek government, the Chinese Exim Bank financed and China Railway Tunnel Group technically supported the construction of the 19.2 km tunnel “Kamchik”, the most difficult and important part of the whole railroad[3]. The World Bank also contributed to the successful implementation of this infrastructure project. In future, this railroad is expected to be a part of the broader China-Kyrgyzstan-Uzbekistan rail link. According to forecasts, the new railroad line should provide the annual transportation of 10 million tons of national economic cargo and 600

[3] International Bank for Reconstruction and Development project appraisal document on a proposed loan in the amount of US$195 million to the Republic of Uzbekistan for a Pap-Angren railway project. Published on January 22, 2015. https://documents1.worldbank.org/curated/en/579571468301525990/pdf/880150PAD0P146010Box385411B00OUO090.pdf

thousand passengers[4].

Furthermore, Chinese investors have funded several projects in this region including production of coal briquettes, rubber tyres, ceramic tiles, steel pipes, concrete blocks, etc. Therefore, Angren is one of rare Uzbek regions with such extensive Chinese involvement within both BRI and bilateral cooperation. This involvement of Chinese and other foreign investors positively influenced local economic situation through expanding employment opportunities, improving infrastructure and connectivity, restoring the old or building new factories, decreasing spatial inequality.

Blending globalism with regionalism, as set out in the strategy of the new Uzbekistan, is the key objective of both the BRI initiative and Tashkent's foreign policy. Angren is the first step in lifting the economy of the country through this Chinese Grand initiative. It has been interesting to explore how this particular project in Angren has influenced the life of local communities there. To what degree their daily life has been affected and their interests have been taken into account while constructing the railroad can be an interesting point for exploring real impact of the initiative. Furthermore, whether this project has implication on environment is another question to be addressed. This would provide insights on how this can develop further in and beyond Uzbekistan.

Angren is interesting not only in respect of this road and this connection, it is revolving city of Uzbekistan, new manufacturing centre, which is now attracting more international investments, not just Chinese, but we see now Turkish investments, Italian investments who now established some factories both in Angren and Pop, and producing variety of goods. After choosing these districts we made focus group discussions and had responses from 32

[4] Rahimov, Mirzohid (2016). 'The Pap-Angren Railway and Its Geoeconomic Implications for Central Asia.' Published on April 19th, 2016. https://www.cacianalyst.org/publications/analytical-articles/item/13354-the-pap-angren-railway-and-its-geoeconomic-implications-for-central-asia.html

participants. After that, in late August and early September we conducted two expert panels. We involved 8 national experts on political processes, economic development, gender issues, ecologic sustainability, sociology, anthropology, transport, etc.

From shared photos of FGDs we can see that we tried to reach not just administrative centres like Pop township, but we went beyond and had group discussions also in small villages. We had a FGD in the village which is located very close to this railway. You can also see the focus group discussion in the Pop district centre. We tried to ensure maybe not an ideal, but close to that gender balance among the respondents, and also invited people with variety of backgrounds – people from public institutions, retired people, young people, people working in local communities, called Mahalla and Mahalla leaders were also involved in these discussions.

The group meetings have been conducted in Angren, again we tried to conduct FGDs both in the central areas and suburbs of the township. Therefore, one of the meetings was conducted in one of the mahallas at the outskirt of Angren. Again, we tried to involve people of different ages, professions, households and people who are actively working in public places, schools, healthcare sector, young people, who are doing some voluntary work, i.e., a variety of respondents.

In general, people predominantly expressed very positive approach both to the implementation of the infrastructure projects like Angren-Pop railway and implications of globalization on their lifestyle. They are quite happy, that these changes are supporting the rise of local economies. Also, they see that there are many opportunities and these developments brought great attention of public officials to Angren and Pop district. As a result, local infrastructure improved substantially. Before that people had problems with supply of electricity, drinking water, and access to public services, but due to this big interest and involvement of foreign investors local administration managed to

improve the situation and resolve the problems.

They also mentioned that people involvement has been enhanced under the influence of globalization. People now even in the remote areas have better access to education and healthcare services. And the other thing they mentioned is that due to the globalization, ease of mobility, high unemployment and poverty rate, many men left these places for labour migration, they mentioned such countries as Russia and Turkey. To less extent respondents mentioned such countries as South Korea, USA and EU. Finally, positive implications are that arrival of foreigners gave the positive impetus to local economies supporting property market because they have funds to spend on this market, in service sector, production of goods, so it makes impact on attractiveness for investors. As a result, a number of new hotels and shops were established.

Among negative implications that they mentioned is the fact that values and traditions of the people have been attacked by the changes in their home towns. Many young people have been leaving their home areas because globalization gave them opportunities, and they chose to leave these places for education or employment. They also emphasised that the infrastructure projects did not hire many long-term local workers to build and maintain them. This position has started to improve recently but not yet substantially. Local people are also using the newly built infrastructure in a limited way. The village, where FGD has been done, is just few hundred meters from the railway, but actually they are using this railway very rarely. The prefer still to use cars to travel around, to go to the capital, so, in this aspect the railway apparently did not influence their lifestyles considerably.

Salaries of local people didn't increase significantly. There was slight rise of 10-15 per cent, which is not substantial. They also mentioned, that education has not improved substantially, especially Angren respondents mentioned that despite this big attention to this township there is still no

higher education institution in the town. They have to send their children to other cities, Tashkent and abroad to get higher education.

And finally, at some point experts mentioned that local communities should be more proactive in designing big projects, and not to follow just what is given by the national institutions and international organizations, but also to pay more attention to important proposals elaborated considering local specifics and priorities. The task is not just to construct infrastructure, but also connect it correctly with large transcontinental transport streams. Furthermore, we usually blame foreign investors that they violate our national legislation, but there is also a problem of our own system, that our legislation is not developed enough and we allow them actually to violate these rules. If we provide clear and transparent regulations to foreign investors, maintain consecutive and sustainable monitoring on the implementation of the projects, their efficiency can improve extensively.

In general, implications of infrastructure projects implementation have been mixed in Angren and Pop district. People could improve their connectivity with many other parts of Uzbekistan, enhance economic opportunities and revitalize local communities. At the same time, positive effects of this project have not been distributed evenly and could not create long-term economic development without further additional investments, coordination with the implementation of other projects and considering concerns of local communities within these changes. Respondents shared that they would greet more transparency on planning, funding and implementation of various infrastructure projects in their local communities.

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Dilemmas of Connectivity through Infrastructure Projects in Contemporary Central Asia

Akmaljon Abdullayev*

Abstract: The external donor communities have been supporting connectivity in five Central Asian states through major infrastructure projects. The great amount of money has been spent to construct roads, pipelines, dams, and railroads to enhance intra-regional as well as international trade. However, the governments of the region have alternative vision from these projects. The cases from recent history demonstrate that Central Asians take extraordinary measures in support of national infrastructures while reluctant for international ones. I argue that nation building processes still ongoing, and the current generation of post-Soviet elites are unprepared to limit sovereignty for the sake of achieving strategic goals.

Dismantling of Inherited Infrastructure

Contemporary scholarship on Central Asia circulates the constructed myth of geographically isolation of the region from international trade. Many policy briefs and academic articles describe states of the region as remote, poorly connected, landlocked or double landlocked countries (Russell, 2019). However, the five, currently independent Central Asian states are located at the crossroads of ancient trade routes between Europe and Asia. Until

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dissolution of the USSR, they were mainly connected north westwards due to objective reasons. Inhabitants enjoyed roads, railroads and pipelines constructed during Soviet period and goods as well as people from Central Asia were travelling from Kamchatka on the East and Berlin on the West. The large-scale connectivity infrastructures started by the Russian Empire during its expansion into Central Asia in the 19th century, Trans-Caspian Railway and Turkestan–Siberian Railway are the initial ones which later played crucial role in connectivity of the region with the rest of the world. The World War II was a vital historical process in connectivity of the region and mobilization of Central Asians to the West and many Central Asian have served in Red Army bases located in Eastern Europe after the war.

Along with the people, commodities of all kinds have been exchanged between Central Asia and the rest of the world. The products made in Hungary, Czechoslovakia, Bulgaria, German Democratic Republic could be found in practically every city or rural areas of Central Asia not to mention products made in Ukraine, Moldova, or Baltic republics. In addition to the established standard gauge railroads between Europe and Central Asia, buses made in Hungary (Icarus) had been connecting people and goods throughout Eurasia. The region was not consumer of commodities but was fully integrated into wider production cycles. For instance, Tashkent Aviation Production Association named after Chkalov (TAPOiCh) was a leading high-technology company of Uzbekistan, which was originally moved from Russia to the rear area of the Soviet Union in 1941.

After becoming independent, the governments had to focus on nation building process that started with drawing flags, language policies, and building institution, searching applicable ideology, and surprisingly creating new and dismantling existing infrastructures. The most of the infrastructures that exists across Central Asia was developed when the areas were within the

Soviet Union. As a result, it often disregards existing national borders. After the dissolution, this infrastructure has faced decline and degradation. It reached to the fact that existing roads, power plants, public facilities built during Soviet period were disappearing because the equipment was wearing out, the personnel retiring or dying. The governments made little effort to maintain or replace either, or funds allocated for this purpose have largely been eaten up by corruption. Cities and rural areas have been experiencing gas supply shortage, electricity blackouts and drinking water shortages (ICG, 2011). Each state had to establish borders, customs, visa processes and in some cases fences and even land mines. The nation building process also involved limiting of existing political or cultural cooperation and the economic activities between states had declined. The specialists who were trained during soviet times and their networks have become limited or non-existent.

The countries of the region have inherited important water management facilities as well. However, during independence years the governments have transformed “their national policies into everyday water management (grass roots) decisions and into hydro-politics (interstate)” because of nation building processes. In addition to agricultural reforms, energy development of the upstream countries of Kyrgyzstan and Tajikistan run into conflict, created tension related to irrigation water needs of the downstream states of Kazakhstan, Turkmenistan, and Uzbekistan. These practices could have never been in place if there were no significant water management infrastructures in the region.[1]

Infrastructure as Weapon

As the nation building processes progress, the large-scale

[1] Abdullaev, I., & Atabaeva, S. (2012) Water sector in Central Asia: slow transformation and potential for cooperation. International Journal of Sustainable Society, 103-112.

infrastructures have become the political weapon between Central Asian states for many years. For instance, the tensions between Uzbekistan and Tajikistan had lead states use infrastructures against each other. As the Uzbekistan had limited transport corridors, Tajik government had focused on construction of Rogun Dam, as a path toward energy independence, a project that allows it to develop its energy-intensive industries including the Tajik Aluminium Plant, which provides the bulk of export revenues, along with the Rogun Dam[2]. In addition, Tajikistan had implemented procedures, so it was difficult for the use of railroad connecting Ferghana Valley with the rest of Uzbekistan. The latter policy of the Tajikistan has likely played decisive role in construction of 123 kilometres long the Angren-Pap railway, through high mountainous areas, including areas with an elevation above 2000 meters, and with tunnel of 19 kilometres. The cost of the project was over $1.6 billion, and its construction has been made possible through a variety of sources: more than $1 billion from Uzbekistan Railways and Uzbekistan's National Reconstruction and Development Fund, a loan of an additional $350 million from China's EximBank, while the World Bank provided $195 million.[3] Another example is interstate railroad along with the south of Central Asia. In 2018, the relations between Tajikistan and Uzbekistan have improved significantly and official opening ceremony of the Galab-Amuzang railway line took place. The presidents pressed a symbolic button and started the movement of the train.[4] However, this was the re-opening of the existing infrastructure that was built during Soviet times and was closed in November

[2] Bologov, P. (2016, December 2). The Rogun Dam: A Source of Division in Central Asia. Retrieved from Carnegie Moscow Center: https://carnegiemoscow.org/commentary/66334

[3] Rahimov, M. (2016, April 19). The Pap-Angren Railway and Its Geoeconomic Implications for Central Asia. Retrieved from The CACI Analyst: https://www.cacianalyst.org/publications/analytical-articles/item/13354-the-pap-angren-railway-and-its-geoeconomic-implications-for-central-asia.html

[4] Juraev, F. (2021, April 23). Key priorities of Uzbekistan for the comprehensive development of transport corridors in Central Asia. Retrieved from The Institute Strategic and Regional Studies under the President Republic of Uzbekistan: http://isrs.uz/en/maqolalar/klucevye-prioritety-uzbekistana-po-vsestoronnemu-razvitiu-transportnyh-koridorov-v-centralnoj-azii

2011 when the relations between countries were tense. According to local media, the main version of the incident was a terrorist act.[5].

Accessing Ferghana Valley was not only difficult for Uzbekistan. Tajikistan as well had to connect with its northern territories. It had to invest approximately $296 million into the improvement of the road between Dushanbe and Khujand. A total of $281 million was provided by the Peoples Republic of China (PRC) in the form of a 20-year concessional loan at a 2% interest rate. The construction was delegated to road construction companies of the PRC. They reconstructed an old mountain pass but had to enlarge the road and rebuild almost 40 bridges and three tunnels with total length of the road 354 kilometres.[6]

These discussed three infrastructures: Rogun Dam, Angren-Pap, and Dushanbe-Khujand Road have common feature. Although they have external impact, all of them have been implemented within national territories. The governments have made commitments and took big loans because as they view, these projects would strengthen their nation building processes. At the same time, in implementation of these three projects adjacent states have been sceptical or opposing their implementation. The president of Uzbekistan criticized plans of the neighbouring states to dam rivers for hydropower projects and said that “a dispute over Central Asian water resources risks provoking military conflict in the former Soviet region”.[7] Certainly, neither of the governments were willing to develop intra-regional or international trade while implementing these projects. On the contrary, they aimed short term

[5] Niyazmatov, A. A. (2011, November 19). Взрыв прогремел на железной дороге в Узбекистане, пострадавших нет. Retrieved from RIA NEWS: https://ria.ru/20111119/492519755.html

[6] Parpiev, Z. (2021). Are Public–Private Partnerships a Solution to the Lagging Infrastructure of Tajikistan? In N. Yoshino, B. Huang, & D. Azhgaliyeva, Developing Infrastructure in Central Asia: Impacts and Financing Mechanisms (pp. 231-260). Asian Development Bank Institute.

[7] Nurshayeva, R. (2012, September 7). Uzbek leader sounds warning over Central Asia water disputes. Retrieved from Reuters: https://www.reuters.com/article/centralasia-water-idUSL6E8K793I20120907

national interests in implementation while leaders across the border perceived threats from these infrastructures.

Obviously, Angren-Pap railroad is the part of the greater project that connects Central Asia with China. The China-Kyrgyzstan-Uzbekistan railway has been under discussion for 25 years, but construction has not started on the Kyrgyzstan territory. Despite numerous high-level meetings, the three countries have failed to reach a consensus on the route, railway tracks and sources of funding, and to address environmental, geopolitical, and national security concerns.[8] The head of the Association of Carriers of Kyrgyzstan, Temirbek Shabdanaliev, believes that it is unprofitable for Russia and Kazakhstan to build the China-Kyrgyzstan-Uzbekistan railway, since these countries do not want to lose their “railway monopoly”[9].

Infrastructures on the Borders

Delimitation and demarcation are part of nation building process and the tensions between states in Central Asia touch upon the infrastructures that are located within national territories. There have been number of casualties over large and small infrastructures, especially in Ferghana Valley where three states share borders. Certainly, major infrastructure projects are international in nature and some of them have historically been located on the borders when borders were not materialized. For instance, Kampir Abad reservoir was built in 1983 when there were no clear borders. Water from two rivers Kara-Darya and Zhazy flows into it. The total volume of water is 1,900 cubic meters. Two hydroelectric power plants in Ferghana Valley, which are

[8] Dzamukashvili, S. (2021, August 10). Future of China-Kyrgyzstan-Uzbekistan railway remains uncertain. Retrieved from Emerging Europe: https://emerging-europe.com/news/future-of-china-kyrgyzstan-uzbekistan-railway-remains-uncertain/

[9] Tazabek News Agency. (2021, March 5). России и Казахстану невыгодно строительство железной дороги Китай—Кыргызстан—Узбекистан. Глава Ассоциации перевозчиков Т.Шабданалиев рассказал почему. Retrieved from www.tazabek.kg/news:1686318?f=cp

used by Uzbekistan, are located on the reservoir.[10] During delimitation and demarcation process states exchanged territories but local inhabitants resisted on the exchange and the reservoirs' territorial affiliation is still unclear. Another example is that in 2021, there were clashes causing many deaths along the frontier between Tajikistan's northern Sughd province and Kyrgyzstan's southern Batken province because of a dispute over a reservoir and pumping station, claimed by both sides, on the Isfara river[11]. These tendencies highly likely to continue as states has not succeeded in convincing each other and agreed on the use of infrastructures that are located on the borders.

While the governments negotiate and come to certain degree of agreement on common use of infrastructures that are located on the borders. Local inhabitants emerge and question those agreements. This demonstrate that the population as well does not have trust neither to the government nor to the neighbouring communities. Thirty years of independence and nation building processes has caused mistrust and anxiety among populations as well. No common media has been established so far. The significant portion of people living in different states have little or no information about the political, social, economic, and cultural processes taking place in adjacent states. Limited cross border activities have been impacting the development of international infrastructure projects in Central Asia.

Governments have so far been mainly involved in nation building, perhaps natural and objective process. Many experts assumed that shared language, religion, and Soviet experience — all of this could have been

[10] Baughman, K. (2021, April 10). Can an Uzbek-Kyrgyz border deal ease regional water woes? Retrieved from Foreign Brief: https://www.foreignbrief.com/former-soviet-union/can-an-uzbek-kyrgyz-border-deal-ease-regional-water-woes/

[11] Dzyubenko, O., & Pirnazarov, N. (2021, April 29). Kyrgyz and Tajik security forces clash at border in water dispute . Retrieved from Reuters: https://www.reuters.com/world/asia-pacific/kyrgyz-tajik-security-forces-clash-border-water-dispute-2021-04-29/

mobilized to build a shared regional identity. However, 30 years of independence demonstrated not only failure in development of common identity but demolishing of the existing values, networks, and infrastructure. The latter as stated above has in some cases served as an instrument in this demolishment.

Conclusion

The major infrastructure projects in Central Asia remain problematic because nation building processes is not over. Although the states of the region share a common strategic environment, each has specific constraints and develops own strategies that sometimes are divergent to ones of the others. Their strategies making the governments to demolish inherited infrastructures that have served for many years but also could have been in common use in the long run. There have been number of cases when infrastructures have been used as political weapons during contradictions between states in the region. The governments have been active in engagement to projects that, in their view contribute to the nation building but have been extremely sensitive about involvement of neighbouring states to water related infrastructures and the dynamic of direct military conflict between states have been increasing especially in Ferghana Valley where three states have territories.

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New challenges and opportunities for Central Asia: trade and knowledge corridors

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Abstract: The CAREC Programme, development initiative by ADB and other multilateral partners and 11 member countries target sustainable economic development in this region. The CAREC programme has been crucial in bringing investment, infrastructure development and developing strategies for different sectors. CAREC Programme focuses on 6 corridors which link CAREC region's countries with each other and outside world. The corridors, although, are key infrastructure and border crossing points (BCPs), from point of economy, became more of economic means for regional integration- trade routes. Recently, the CAREC Institute has also developed concept of knowledge corridors, which includes cooperation between Think Tanks, knowledge exchange and educational cooperation. This paper describes main challenges the region is facing and the role of trade and knowledge corridors in reducing risks.

Introduction

The CAREC Programme, supported by international partners and 11 member countries[1] and targets economic development, regional integration, and cooperation in Central Asia. The CAREC Programme since its inception has mobilized 40 billion US investment for different projects.[2] The programme

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[1] CAREC Member countries: Afghanistan, Azerbaijan, Georgia, China, Kazakhstan, Kyrgyzstan, Mongolia, Pakistan, Tajikistan, Turkmenistan, Uzbekistan

[2] CAREC Program | CAREC Program

has promoted economic cooperation through setting up regional transport, energy and other sectoral strategies and knowledge sharing. The programme focuses on 6 corridors (CAREC Corridors) which are intra-regional and international crossing points, connecting points of Central Asia. Started as transport corridors, lately started to be called as economic corridors. This indicates the change in use of these corridors, initially corridors were border crossing points (BCPs), however positive impact of the CAREC programme have been bringing more intra-regional trade. However, the CAREC region is still considered among least integrated regions in Asia[3]. Therefore, improved trade, reducing barriers for regional cooperation will be important aspects of the CAREC programme.

The CAREC region is facing global challenges such as climate change impact, reduced mobility due to COVID-19 restrictions and few specific ones, related to the geographic location and economies. These challenges include low levels of industrialization (except China), dependence on natural resources, low levels of service sector's share in economies, etc. These challenges already have negatively influenced economic development in the region, reducing GDP's, creating high-level of unemployment, and increasing the migration both within and outside the region[4].

According to the CAREC Institute's analyses[5], climate change vulnerability in the water, agriculture and energy sectors is creates high risks to sustainable growth in the region. On top of adaptation and mitigation measures, which countries formulated in their nationally determined contributions (NDCs), intensive regional trade in goods, services will help to

[3] ABD.2022. Asian Economic Integration Report 2022

[4] Hans Holzhacker Kamalbek Karymshakov Shiliang Lu.2022. CAREC Institute Quarterly Economic Monitor. January, 2022

[5] Atabek Umirbekov, Iskandar Abdullaev, Shakhboz Akhmedov, 2020. Determinants of Vulnerability to Climate-Induced Water Stress in CAREC. CAREC Institute. Policy Brief

compensate the negative impacts of climate change. The latter could be achieved only via development of both economic and knowledge cooperation in the region. In this paper, the author presents the details of economic and knowledge corridors in the CAREC region.

Economic Corridors

Economic corridors are the confluence of economic development and integrated growth in defined areas that involve intensive interaction of productive factors.[6] The areas that enjoy cumulative benefits as a result. Besides the direct benefits the involved countries might reap from, economic corridor has indirect values that affect many lives in adjacent areas. The corridor may provoke industrialization of lagging regions that brings employment and other social opportunities. At the same time, this can accelerate regional integration in general.

CAREC corridors are economic arteries for trade, communication, and cooperation. Therefore, performance of existing corridors and forming new ones will enhance above listed activities in the region. Current 6 corridors include all important, bi- and multilateral border crossing points (BCPs) and cover all 11 member states of the CAREC region.

Since the launch of the CAREC Program, the time for passing through six corridors has been tremendously reduced (ADB, 2020). Almost triple decline of the travel time could be attributed to the improved infrastructure, increased trade and removal of many barriers to free trade in the CAREC region[7]. The corridors have been key in unlocking regional trade, cooperation, and integration. All corridors, initially being bi-lateral border

[6] ADB 2013. What is Economic Corridor Development and What Can It Achieve in Asia's Subregions? ADB Working Paper Series on Regional Economic Integration. 2013.

[7] ADB (2020). CAREC Transport Strategy 2030. Manila.

crossing points (BCP), later became regional hubs connecting the countries regionally and internationally. However, CAREC corridors still require high costs and time for passage. Moreover, the number of corridors seems to be insufficient for handling current levels of the shipping of the goods regionally and globally.

Economic Spillover

Economic cooperation in the region is essential for future sustainable development, economic growth, and social stability. Trade and economic cooperation are key elements of sustainable development in the region. Improved economic development in countries of the region and increased regional trade, cooperation are major pre-conditions for long-term prosperity.

The CAREC region is among the least integrated ones in the world, only 8% of overall trade is of intra-regional character (ADB 2018, CI 2019). This is largely due to security issues associated with uncontrolled drug-trafficking in Afghanistan and many CAREC countries' constant insistence on non-interference in domestic affairs since the collapse of the Soviet system. These coupled with water contest in the Central Asian region, though lately it seems to be appeasing, have overshadowed areas with more potential for economic cooperation over the years. The latest political developments in Central Asia, particularly in Uzbekistan, are likely to build favourable intraregional environment for more accelerated economic cooperation.

Yet today still the CAREC region's economic performance and development state are uneven, with countries like the Peoples Republic of China (PRC), Kazakhstan being upper-middle income and some countries being least development ones (WB 2020). Therefore, these countries are having more of compatibility than competition of their economies. However, due to many reasons, most of all strict regulations and trade barriers, the

region's countries are under-utilizing economic compatibility. The trade potential of the CAREC region with the PRC equals to 1-2 trillion USD and 500 billion USD without the PRC (ADB. 2018). These are huge opportunities for the countries of the region, if they reduce the barriers and limitations in trade.

Social Spillover

Social considerations have always been a significant part of economic development that means mobility of people, proper wages, amongst others. Through economic corridors, the mobility of people can be eased which has immense social impact on the lives of many. As mobility becomes easier, cheaper and more convenient, the more opportunities unlock for businesses, adjacent industries, spaces for innovation and overall societal development. The CAREC 2030 Strategy aims to strengthen these aspects of regional integration and development by fostering economic and social cooperation among cross border communities.[8]

In the CAREC region the levels of economic development of countries differ significantly (ADB.2019). Therefore, the levels of poverty and quality of life also vary largely. According to the recent World Bank Report (WB, 2020) the levels of poverty in CAREC countries vary from 5% to 40% and due to COVID-19, around 20 million people may be in dire poverty in the region.

Economic slowdown and reduced job opportunities may further deteriorate social situation in the CAREC region. However, increased trade and improved partnership, regional cooperation may bring more opportunities for many poor in the region. Therefore, the region could benefit from the corridor improvements not only economically but also socially.

[8] ADB (2020). Strengthening Cross-border Community Collaboration in the CAREC Region. A scoping study. Manila.

Knowledge Corridors

Knowledge corridors can be visualized as an interconnected web with virtual destinations, thoughts, and ideas of knowledge enablers (government), knowledge articulators (sector experts), knowledge generators (research entities), and knowledge transformers (business sector) to translate knowledge into tangible gains/ policies. Like in case of the economic corridors, the expected outcome of knowledge corridors is the support for regional cooperation.

In the past, knowledge, skills and information sharing, exchange and adoption were key attributes of the ancient Silk Road that benefitted societies, communities, and artisans along its trade routes. With absence of modern telecommunication and postal services, great knowledge hubs were established which enabled the cities along the Silk Road to flourish.

Today, the region lacks effective mechanisms for promoting the regional knowledge integration. Unlike infrastructure, which is tangible, knowledge corridor is an intangible pathway. It is a missing link for completing the connectivity paradigm. Knowledge corridors, alongside the economic corridors, can not only strengthen connectivity but also contributes in sustaining it.

Knowledge corridors are vital in strengthening the regional economic cooperation and integration. Many regional cooperation initiatives and coordination mechanisms, the Central Asia Regional Economic Cooperation (CAREC) program, the Belt and Road Initiative (BRI) and the recently discussed Caspian Economic Cooperation Organization are all aimed to provide substantial commitments in economic cooperation and development by accelerating infrastructure development, enabling regional connectivity, facilitating cross border trade and investments, and strengthening bilateral financial cooperation.

In terms of strengthening closer regional economic cooperation, policy dialogue mechanisms, coordination and coherence among states, roles of multilateral development finance institutions and transnational entities are important. This will bring successful scaling-up of limited resources, sharing our best practices among and with other countries, and growing together to achieve our ambitious goals for benefit of people along the Silk Road.

The long-term future of regional trade can be reshaped by technological shifts as well that would affect overall operational modality of corridors in the region. Successful function of knowledge corridors can trigger technology exchange in the region that would positively impact the trends on regional trade which could be leveraged for competitive advantage. Unfolding more regional value chains, what can be advised in times of high trade uncertainty as now, rather than chasing after global ones, could be strongly supported by changing technologies which will have a profound effect on trade growth.

Countries in the CAREC region are very diverse in terms of their culture, tradition, language, governance, and socio-economic development. However, there are shared values, such respecting their differences and building on their common interests. This makes a good foundation for a sound regional cooperation framework. As there are gaps in regional knowledge accumulation, institutional capacity building, technology integration and harmonization of enabling policies and standards, there is a strong need for innovative platforms for systematization and acceleration of learning and sharing best policies and practices.

Analysis and recommendations

In relation to the growing importance of infrastructure connectivity, regional cooperation, trade and transport facilitation, digital technology; there is a growing need in and value for knowledge, good knowledge development

and valuable knowledge and technology sharing. To promote regional trade and knowledge corridors, it is important to understand the context of their possible positive impacts. It is also important to provide instruments and platforms for promoting of both trade and knowledge corridors.

To support knowledge generation and sharing by think tanks in the region, the CAREC Institute initiated the Research Grants Program in 2019. Since then, annually five grants worth up to US$10,000 funding for each research have been provided to research institutions of Georgia, Kyrgyzstan, Pakistan, Uzbekistan and Afghanistan on the following topics: (i) assessing participation of CAREC countries in global and regional value chains; (ii) studying the cross-border tourism value chains between Uzbekistan and Kyrgyzstan; (iii) impact of sanitary, phytosanitary, and quality-related standards on the trade flow between CAREC countries and Georgia; (iv) opportunities and challenges for agri-food trade between Kyrgyzstan and Pakistan; and (v) building bankable and viable regional cooperation programs based on trust.

In addition, the CAREC Institute and ADB launched a three-month long Visiting Fellowship Program at the CAREC Institute head office in Urumqi to foster a research environment and deliver new insights on topics that promote regional integration and cooperation in CAREC, particularly as anticipated in the CAREC 2030 strategy and stated operational priorities including (i) economic and financial stability; (ii) trade, tourism, and economic corridors; (iii) infrastructure and economic connectivity; (iv) agriculture and water; and (v) human development.

Considering the travel restrictions, during the COVID-19, CAREC region witnessed jump on electronic trade and digitization processes. The CAREC Institute has launched E-Learning platform which provides access to all relevant knowledge the Institute produced within 2020-2022. This initiative

illustrates the availability of the platforms for the knowledge corridors promotion in the region. Hopefully, utilization and dissemination of knowledge corridor platforms will bring the expansion of trade and regional integration.

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4. Hans Holzhacker Kamalbek Karymshakov Shiliang Lu.2022. CAREC Institute Quarterly Economic Monitor. January, 2022
5. Atabek Umirbekov Iskandar Abdullaev Shakhboz Akhmedov.2020. Determinants of Vulnerability to Climate-Induced Water Stress in CAREC. CAREC Institute. Policy Brief
6. ADB 2013. What is Economic Corridor Development and What Can It Achieve in Asia's Subregions? ADB Working Paper Series on Regional Economic Integration. 2013.
7. ADB (2020). CAREC Transport Strategy 2030. Manila.

Turning the Tide – Reckoning with Overlooked Opportunities of Climate Cooperation in Central Asia

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Abstract: Climate change is augmenting in volume and impact on Central Asian economies and the same is true with countermeasures by Central Asian countries. Yet, these balanced actions cannot promise sustainability ahead, as the implementation of net-zero commitments are lagging behind globally. Bolder measures with strengthened regional cooperation should be deployed immediately. This paper explores the overlooked regional actions that could trigger more efficiency and effectiveness in fighting with climate change impacts in Central Asia. It is designed to discuss the climate change characteristics in the region, by highlighting socio-economic consequences and making an overview of regional collaboration.

Introduction

The world fell prey not only to health and economic crisis due to the global pandemic of COVID-19, but it also witnessed regressing socio-environmental progress in the wake of changed societal priorities, for example, coping with public health crisis and economic recovery. Yet, there is climate change impact augmenting progressively with big implications for societies, economies, businesses, and natural capital. It has become an omnipresent complex issue, which is beyond one country's capability to

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overcome. It is among the biggest risk factors of the 21st century with knock-on effects on water, agriculture, energy, food systems, supply chain, infrastructure, and economic development[1].

As climate continues to heat the Earth, it is massively staggering away all sectors of economy. Its impacts also pose health insecurity creating more favourable environment for proliferation of infectious diseases, like currently continuing COVID-19 outbreak. As the world has seen throughout the pandemic period that no boundaries are respected, when it comes to COVID-19, climate has the same characteristics of expansion. The only difference might be that there is no vaccine for climate change. The exposure of countries and regions to climate risk differs in volume and impact, yet none are immune to its hazards.

In times of high uncertainty, intercountry and intersectoral cooperation has therefore become an imperative for strengthening resilience to risks as such and for coping with them efficiently. The complexity of climate change makes intersectoral connections and intercountry dependencies even stronger. The Paris Agreement on Climate Change and the Agenda 2030 of Sustainable Development, signed in 2015, call for governments and their national plans to combat climate change. All five Central Asian countries adopted the agreement and agenda. They also signed the Sendai Framework in 2015 to address a broader scope of hazards and risks to prevent and mitigate shocks caused by natural and man-made hazards. In combination, all these agreements are designed to reduce climate risks and build resilience of the region to climate effects.

Yet, the world, including the Central Asian region, is increasingly facing unprecedented challenges. Each year countries are falling behind on their

[1] CAREC (Central Asian Regional Economic Cooperation) Institute 2020. Climate Vulnerability, Infrastructure, Finance and Governance in CAREC Region. Research Report. Urumqi, 2020

commitments to SDGs and other global frameworks designed to build sustainable life. Warming planet, poverty and inequality, biodiversity extinction and massive deforestation, degradation of land resources and depletion of water supplying sources are to name a few factors that will shape the degree of resiliency of future generations to challenges and shocks of diverse environmental, economic and social hazards.

Against this backdrop, this paper tries to ignite discussion about potential opportunities overlooked in tackling with climate risks and unlock policy options to turn the tide. Climate issue in Central Asia, as in many other parts of the world, is not only an environmental crisis of immense proportion, but it is also an imminent matter of near-term economic, social, and financial survival with potential devastating effects on lives. Climate action should therefore go beyond overlooked opportunities and tap into new, innovative ways of dealing with impacts while navigating to what they bring next.

Characteristics of Climate Issue in Central Asia

Central Asia is one of the highly vulnerable regions to climate change. The region is warming faster than the global average[2]. While the average annual temperature in Central Asia has risen by 0.5 degrees Celsius over the last three decades, it is further poised to increase by 2.0 to 5.7 degrees Celsius by 2085[3]. The changing average temperature and precipitation patterns will have a growing impact on climate volatility, affecting key spheres, such as disaster management, water resources and agriculture – while the latter two are critical drivers of economic growth. Increase in temperatures, coupled with changing seasonal and spatial patterns in

[2] Ibid

[3] SIPRI (Stockholm International Peace Research Institute) 2018. Central Asia – Climate Related Security Risk Assessment. Expert Working Group Report. Stockholm, 2018.

precipitation, caused more frequent and severe droughts in the region, especially in the Central Asian plains[4].

This is observed by increasing release of carbon and methane stocks and substantial reductions in mountain snowpack and the depleted volume of mountain glaciers and permafrost that are critical sources of water supply for the region. This, in turn, is accelerating warming, which is expanding complexities to already overexploited natural resources by increasing vulnerability of rural communities, livelihoods, infrastructure, businesses and vital economic sectors. Climate-induced multisectoral security threats are set to drive complex interactions with existing stressors, including socioeconomic, political, and natural hazards, thus undermining societal resilience.

As has been evidenced across the region recently, Central Asian countries are poised to experience increased incidences of extreme weather such as dust storms, melting permafrost, wildfires, floods, mudflows, landslides and droughts[5]. A particularly complex challenge is the water-food-energy nexus. Water is a critical resource for the socio-economic development of all the countries sharing the Aral Sea Basin. Electricity production, as an essential facilitator of economic growth, and food security, as a foundational aspect of social stability, both rely on scarce water resources. Yet, water is the most vulnerable to climate change.

Figure 1 depicts water sector vulnerability index scores for five Central Asian states, developed by the CAREC Institute (2020), vulnerability index is calculated based on the following formula:

$$VI = (Exposure * Sensitivity) / (Adaptive\ Capacity)$$

[4] Spinoni J., Barbosa P., De Jager A., McCormick N., Naumann G., Vogt J. V., Mazzeschi M. (2019). A new global database of meteorological drought events from 1951 to 2016. Journal of Hydrology: Regional Studies, 22 (October 2018), 100593. https://doi.org/10.1016/j.ejrh.2019.100593

[5] USAID 2018. Climate change profile: Central Asia

In this formula, the first indicator is **exposure** - the nature and degree to which a system is exposed to significant climatic variations, and it is based on the projected decrease in availability of water resources by 2040. The second indicator is **sensitivity** - the degree to which a system is affected, either adversely or beneficially, by climate-related stimuli. This indicator derived from a combination of several sub-indicators such as water withdrawal to availability ratio, water consumption per GDP, and water dependency ratio. Third one is **adaptive capacity** - the ability of a system to adjust to climate change (including climate variability and extremes) to moderate potential damages, to take advantage of opportunities, or to cope with the consequences. It entails infrastructure, institutional, human, and economic capacities of a country[6].

As shown below, climate change will have big implications for the water sector of the region. These challenges are however varying in degree of intensity across the countries. Turkmenistan and Uzbekistan will most likely observe the harshest impacts of climate change on their water resources. All three indicators for these two countries are highlighted in red, which means high risk, while sensitivity and adaptive capacities of Kazakhstan and Kyrgyzstan with low risk, marked in green. However, their exposure represents moderate risk, marked in yellow. Tajikistan is with moderate risk in terms of exposure and adaptive capacity, while its sensitivity is with low risk. Thus, the impacts of climate change on the Central Asian water sector are not evenly distributed. But an increased climate impact on one will have a spill-over effect on another country of the region. This is due, amongst others, to the fact that the countries of the region depend on each other for water, food and energy supply.

[6] CAREC (Central Asian Regional Economic Cooperation) Institute 2020. Climate Vulnerability, Infrastructure, Finance and Governance in CAREC Region. Research Report. Urumqi, 2020.

Country	Exposure	Sensitivity	Adaptive capacity	Index
Kazakhstan	1,00	0,21	1,31	0,16
Kyrgyzstan	1,00	0,22	0,87	0,25
Tajikistan	1,00	0,31	0,67	0,47
Turkmenistan	1,20	0,90	0,31	3,52
Uzbekistan	1,20	0,87	0,28	3,71

Figure 1. Water sector vulnerability index scores for Central Asian countries (Author's compilation from CAREC Institute 2020)

Exposure indicator does not change over time, while the sensitivity and adaptive capacity may change due to effects of economic growth, population increase and other external and internal factors. For instance, implementation of water saving technologies on mass scale will improve water consumption efficiency, and thereby diminish the sensitivity to water availability. Water dependency ratio, which means the share of total renewable water resources originating outside the country, can alter by effective transboundary agreements and data sharing. Similarly, adaptive capacity is subject to improvements in governance. Better governance could be a point of departure in building better resilience to climate impacts. As some studies demonstrate, improved governance is a precondition for better development outcomes such as economic growth, public and foreign direct investment, physical and social infrastructure management[7].

[7] Acemoglu, D., Johnson, S. and Robinson, J.A. (2005) Institutions as a fundamental cause of long-run growth. Handbook of Economic Growth, Volume 1A, Chapter 6, 385–472.

Garcia-Sanchez I., Cuadrado-Ballesteros B., Frias-Aceituno J. (2013). Determinants of Government Effectiveness. International Journal of Public Administration, 36(8), 567–577

Han X., Khan H. (2014). Do Governance Indicators Explain Development Performance? A Cross-Country Analysis. ADB economics working paper series.

The highlighted characteristics of climate change in Central Asia are clearly evidencing how critical is the intersectoral and intraregional cooperation in the region for building and strengthening climate resilience and in dealing with climate risks.

Socio-Economic Impacts of Climate Change

Climate change is a risk multiplier for many economies all over the world. It has compounding effects for Central Asia as well, coupled with existing economic, financial, and social stressors. The socioeconomic impacts of climate change will likely be nonlinear across Central Asia since the region has heterogenous economic and consumption capacity with diverse natural resources. But they will have spill-over effects of varying degrees on others.

In the context of growing population and economic development, which is highly dependent on extractive natural resources, in the coming decades, water, energy, and food demands are projected to increase across all Central Asian countries. Managing the access and use of natural resources in adequate quantity and quality, with constant efficiency improvements, while exploring and accelerating shift to renewable energy sources, are of strategic importance for sustainable development of the region.

As stated earlier, the key sectors of economy – agriculture and water – are the ones to get the biggest impact from augmenting climate with economic and social implications. For example, climate change, affecting the agriculture sector in Central Asia, may reduce its GDP by 1.9% according to Zhai and Zhuang (2009). The cost of climate change is associated with crop yield, livestock productivity losses as well as damages to farm and household assets associated with weather extremes[8].

Marin-Ferrer M., Vernaccini L., Poljansek, K. (2017). Index for Risk Management INFORM Concept and Methodology Report. EUR 28655 EN, doi:10.2760/094023

[8] CAREC (Central Asian Regional Economic Cooperation) Institute 2020. Climate Vulnerability,

Central Asia is highly dependent on agriculture. The sector uses roughly 60% of the region's water and is the biggest source of employment accounting for a third of regional GDP[9]. Yet, it is continuously suffering from increasing water scarcity, soil erosion and outdated infrastructure. Limited financing for the sector is another factor further aggravating the situation. Climate driven socio-economic implications can be therefore tremendous for all countries of the region.

Rising average temperatures driven by augmenting climate change will further extend the duration of warm seasons resulting in prolongation of vegetation season. This will be coupled with an increased number of hot days with temperatures of over 40˚C. As a result, the larger parts of Central Asia may expect drought conditions. A higher frequency of warm days and droughts will affect crop productivity and livestock.

Besides threatening food security, climate disruptions will affect those living in poverty, making them more vulnerable to the health consequences, including malnutrition and increased risk of disease. In addition, increased frequency and intensity of storms can multiply the probability environmental hazards that can damage energy, water, and public health infrastructure[10].

Changes in drought frequency and intensity highlighted in drought index show that Kazakhstan will be the most affected in the region, when it comes crops. Notwithstanding the expected increase in precipitation over the north of Kazakhstan, the grain yields will be adversely impacted by increases in evaporation rates and temperatures that in turn will significantly decrease

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[10] CAREC (Central Asian Regional Economic Cooperation) Institute 2020. Climate Vulnerability, Infrastructure, Finance and Governance in CAREC Region. Research Report. Urumqi, 2020.

grain yields by 2050[11]. As Kazakhstan is a major supplier of wheat and flour products, Central Asia might experience food insecurity by then. Similarly, expanding land degradation, soil erosion and depletion of water resources will also affect the reduction of crop yields further impacting food security and livestock. Beyond that, as a spill-over effect, climate-induced disruption of food production would result in increasing food prices that would lead to economic and social instability. These all, coupled with increasing frequency of climate-induced extreme weather events and disasters, can put communities and their livelihoods at risk, pushing people to migrate on a large scale.

Intrinsically connected with the availability of water resources, the energy sector also causes social and economic disruptions associated with climate impact. Energy is required for the provision of water services, while water resources are required to produce energy. Both energy generation and transmission facilities of the region are the legacies of the Soviet energy system and vulnerable to increasing temperatures and storms. Outdated infrastructure is already precluding efficient energy distribution.

In the absence of climate resiliency measures and modernized infrastructure, the reliability of energy sources may diminish soon as the frequency and intensity of droughts and water shortages are rising. In January this year, millions of people were left for hours without electricity in Kazakhstan, Kyrgyzstan and Uzbekistan. A huge power blackout affected several cities and surrounding provinces in all three countries. Residents across the region lost access to tap water, heating, petrol pumps and the Internet.

Under these circumstances, climate change will have a widespread

[11] Ibid

knock-on effect on vital sectors of economy and sustainable development of the region. Even though all discussed sectors of economy, energy, water and agriculture, are carbon-intensive, enhanced efficiency and targeted regional scale adaptation and mitigation activities can yield results favouring greener and sustainable development. To tackle climate impacts effectively, it is, first and foremost, essential that regional collaboration with specific mechanisms for coordinating efforts is in place.

Regional Climate Connectivity for Collective Resilience

If impacts and implications of growing climate change have come, to a large extent, from the degree of frequency and exposure to hazards in the past, from now onwards the intensity of hazards will likely be more impactful questioning the resiliency of economies and societies. Through concerted efforts on regional scale, Central Asia can build a collective resilience to climate change. As underlined once more by the COVID-19 pandemic, regional cooperation is the most productive way to deal with challenges that do not respect national boundaries.

There are multiple specific reasons why regional cooperation is important. Most importantly, it can be advantageous for cost reduction and resource efficiency. With less resources, more operations can be conducted with more impact. Through regional cooperation, replication and rescaling of best practices can be available and executed more efficiently. Knowledge and technology exchange, along with capacity development opportunities, is another spill-over aspect of regional collaboration for strengthening resiliency. While enhancing collective resilience by mitigating risks of climate change, regional cooperation can also unlock the region’s potential for

accelerated integration for sustainable economic growth[12]. This will unleash regional value chains that are of extreme value in times of high uncertainty as now which is driven by the global pandemic. In particular, agriculture trade in Central Asia can be further strengthened as it is the most regionally oriented value chain.

Climate change places a severe strain on regional agriculture, water, and energy systems. As it has knock-on effect, regional efforts should be able to address multiple priorities simultaneously. Despite a number of regional projects and programs on climate change are being implemented in Central Asia, the area of mutual collaboration is specific[13]. The approach towards the implementation of the projects is often kept within the individual countries, while the regional component is to the most extent span around capacity building, development of joint regional strategies, elaboration of methodologies and research tools, information exchange and building new knowledge[14]. These all still save a space for even better engagement.

Insufficient regional cooperation in the water sector lonely costs for Central Asian countries around US$ 4.5 billion per year according to the joint research of Adelphi and the Regional Environmental Centre[15]. Over the coming decades, as mentioned in previous sections, the economic, social and financial implications of climate change impact on the water, agriculture

[12] Ibid

[13] Engberg-Pedersen, L. (2011) Climate change negotiations and their implications for international development cooperation. Danish Institute for International Studies. Retrieved from https://um.dk/en/danida-en/partners/research/other//~/media/um/english-site/documents/danida/partners/research-org/research-studies/climate%20change%20negotiations%20and%20their%20implications%20for%20international%20development%20cooperation%202011.pdf

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and energy sectors will further aggravate. Regional cooperation and coordination of climate change activities can reduce many of the resulting risks and bring about significant benefits[16].

For the first time in the history of the United Nations Framework Convention on Climate Change (UNFCCC), the countries of Central Asia collectively took part at the 26th session of the Conference of the parties (COP26) in November 2021 and voiced their consolidated position on climate change[17]. Joint events as such will provide Central Asian countries with more opportunities to unlock investments potential, mobilize world-class expertise and best practices and technologies towards the region.

Yet, realization and sustainability of these potential benefits on both national and regional levels depend on government's willingness and supportive actions as per the regional agenda. Economic growth, poverty reduction and financial sustainability are priority topics for most of the governments. Although they correlate with climate change related risks and perspectives, there is still a room for climate topic to get bold attention in national and regional agendas.

Conclusions and Recommendations

Climate change represents an increasingly significant challenge for vital economic sectors of Central Asian countries – it is impossible to overemphasize it. It is multiplying the severity and frequency of climatic events disrupting socio-economic infrastructure and societal systems. Considering the potential regional risks as such, climate change might

[16] Ibid

[17] The Regional Environmental Centre for Central Asia (CAREC) 2021. Historic Event at the UNFCCC COP26: Central Asia - One Region, One Voice. https://carececo.org/en/main/news/26-aya-istoricheskaya-vpervye-za-vsyu-istoriyu-konferentsiy-storon-rkik-oon-pyat-stran-tsentralnoy-a/

emerge as a foundation for strengthening regional cooperation in Central Asia. There are three frameworks necessary for successfully coping with climate challenges: financial, technical, and capacity building. Central Asian region can look collectively to these three areas of focus to unlock financing at scale, deploy necessary technical expertise, and share knowledge and skills for effectively tackling climate challenges.

Finance

Sustainable financing can be unlocked through close collaboration of governments with their partners in development finance institutions for better mobilizing private sector financing at scale. To put this challenge into perspective and bring potential solutions into sight, the following three-pronged strategy could pave the ground for materializing private sector participation in financing climate actions.

First, governance and capability gaps hindering private sector investment should be revealed and addressed. Second, real-world case examples should be identified and explored how they can be replicated and recalibrated in Central Asia. Third, a series of multi-stakeholder climate dialogue meetings should be organized on a regular basis with the participation of relevant sector representatives, regional and international partners to discuss the ways to unlock and scale up private financing. All these could be realized through providing thought leadership on the enabling conditions for scaling private capital through policy advice, better regulations increasing risk-return rates.

Technical expertise

Since Central Asia is one of the most vulnerable to climate change

regions in the world, it can generate exemplar climate fight best practices. This requires commitment from all stakeholders in the region, constant dialogue, and intraregional and interregional exchanges. Two types of regional climate actions could be beneficial in this regard: (i) Promote and strengthen synergies and cooperation among businesses, education institutions and research organizations; (ii) Create favourable environments for creative thoughts, to enable world-class innovation and entrepreneurship. This would allow smart and innovative interventions to scale.

In this context, access to regular, reliable, and detailed country-specific climate situation and forecasts will be a critical need. Joint research on transboundary resource management and constant exchange of scientific findings needs to be a regular practice across the region.

Capacity building

To realize all intended action, capacity of involved stakeholders should be at adequate level. Understanding of climate risks amongst stakeholders at local, national, and regional levels needs to be improved. Capacity development can facilitate informed policymaking which yields better results in their realization. It is essential that capacity is not delivered in a sporadic and fragmented manner, but through coordination and with synergies among different stakeholders that encourages capacity retention.

Tackling climate challenges will not be easy, but it will be worth it to build a more prosperous, equitable, resilient, and sustainable world. Planning these efforts, however, requires that (i) the potential challenges and perspectives are well understood by consumers, citizens, and government stakeholders of the region, and (ii) continuous commitment to and deep engagement of leaders with climate actions is sustained. These two are still an overlooked aspect in the multi-stakeholder engagement with climate

constraints.

In fact, climate fight requires courageous leadership, thinking outside box, and a willingness to confront and tackle climate risks alongside other complex and competing priorities. Drawing climate change away from understanding as only a sector-specific challenge and mainstreaming it as the biggest risk for all layers of societies can shift the perception of its real risk and help to scale actions.

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Mahalla in the Midst of Socio-Political Transformations of the Uzbek Society

Nozima Davletova*

Abstract: Foreign experts usually perceive the term mahalla as an integral part of socio-cultural life of Central Asian societies, while the local citizens are more sceptical about the culturally consolidating role of the former self-governing structure. This article analyses the general context of social and political changes the Uzbek society is undergoing, and the role of mahalla in them. There is also an attempt to explain the logic behind the policy of the government to further expand the political authorities of the mahalla despite public discontent and structural deficiencies of the institution. The arguments are spurred with empirical data, including a social media survey.

Key words: mahalla, social protection, culture, poverty, pandemic

Introduction

Mahalla in Uzbekistan as a mediating institution between citizens and government is undergoing a complex transformation, finding itself at the junction of social, economic and cultural metamorphosis the Uzbek society has been experiencing over the past three decades. Along with increasing legal authorities granted to the mahalla by the government, the public dissatisfaction has been growing disproportionately.

A self-governing body with broad legal authorities in the past, mahalla,

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has recently been turned into a part of the executive branch – Ministry of Mahalla and Family in 2020. According to the Decree, the Ministry is the centralized body for regulating the territorial branches of mahalla across the country and would embrace around 40 thousand staff[1]. The post of the First Deputy Minister was in charge of family, women's issues and the issues of their social protection. Another Deputy Minister became responsible for social protection of elderlies, educating the youth "in the spirit of patriotism", the third one – for liaisons with security bodies and providing a safe mahalla, the last one is in charge of family entrepreneurship and environmental issues. The Minister chairs in the fund "Mahalla", which allocates charity funds for the benefit of those in financial need, disabled members, and also in charge of the moral and spiritual education of the citizens within the area of their territorial responsibility. The first Deputy presides in the fund of Support of women and family, while the Deputy Minister in charge of elderlies and veterans will chair in the fund "Nuroniy[2].

In February 2022 it was announced that the Ministry of Mahalla and Family would be reorganized into two separate agencies: State Committee of Family and Women's Affairs, and the Ministry of Mahalla and Elders[3]. Allegedly, new agencies were created to enforce the respective spheres and reduce the abundant bureaucratic workload of the previous Ministry. The logic of the administration should be sought in attempts to channel the social protection and keep the grip on civic activism without giving too much freedom to non-governmental sector. The Mahalla structure is overly present at all levels, and is among key local partners for international donors.

The mahalla have been a key bastion for Uzbek government's policy of

[1] Газета.uz. 2020. *gazeta.uz* . February 12. Accessed June 11, 2020. https://www.gazeta.uz/ru/2020/02/12/ministry/ .

[2] https://lex.uz/ru/docs/4740337#4741320

[3] Rustamjon Urinboyev, Måns Svensson. 2014. "Living law, legal pluralism, and corruption in postSoviet Uzbekistan." *The Journal of Legal Pluralism and Unofficial Law* (Taylor & Francis) 45 (3): 377-378

distribution of welfare, surveillance policy, policy of mitigation of social tensions over unpopular political and economic measures taken over the past three decades. The mahalla itself have long been a reflection of the state's inability to provide efficient social protection during economic perturbations after the collapse of the Soviet Union, along with cultural transformations that changed the social picture of the society. The revelations of public thefts in the central charity funds under the mahalla and the public discontent regularly expressed over the ineffective functioning of their bureaucratic apparatus are merely the result of the general governance deficiencies in Uzbekistan. Lack of social protection makes people seek services by informal means[4], that produces corruption at all levels, while the corrupt officials undermine the overall public trust to the government.

The present research attempts at understanding the nature of mahalla's inefficiencies and the ways of tackling them in order to reconstruct the pre-Soviet and at least Soviet-period mahalla functions and image of the self-governing institution promoting democratic changes rather than enforcing authoritarianism. Further we analysed the main functions of modern mahalla and attempted at finding the discrepancies between its initial purposes and the present mode of functioning.

The Essence of Mahalla

Initially mahallas had all the features of a civil society institution, which was a mediator between the interests of ordinary citizens and the government, and even defended the interests of the former[5]. This communal

[4] Rustamjon Urinboyev, Måns Svensson. 2014. "Living law, legal pluralism, and corruption in postSoviet Uzbekistan." *The Journal of Legal Pluralism and Unofficial Law* (Taylor & Francis) 45 (3): 377-378.

[5] Dadabaev. 2017. "Between State and Society: The Position of the Mahalla in Uzbekistan." In *Social Capital Construction and Governance in Central Asia: Communities and NGOs in Post-Soviet Uzbekistan*, by Dadabaev, 57-77. New York: Springer.

units have also been seen as a platform for bonding together and express their collective identities[6] . All these were relevant during pre-Soviet and even Soviet times. As a group of authors claim[7], the Soviet period mahallas preserved their roles as guards of collective identities partly due to the Soviet system of administration, where the former used the local mahalla structures to spread its influence. At the same time the local population saw mahallas as a counterbalance to the foreign colonizers and, showed loyalty to the institution functioned indigenously within the traditional structures. In Soviet-period mahallas people used to show a voluntary corporative culture, eagerly participating in mahalla-based events such as *khashar and gap,* detecting families in need and contributing willingly to weddings, funerals and other massive events of neighbours[8].

Compared to the past, the term *khashar* has obtained a negative connotation since independence being closely associated with forced labour. In August 2019 numerous cases of massive forced recruitment to public labour on reconstruction of roads and cleaning were highlighted in media, and required official statement by the Minister of Labour. He defined the difference between the forced and khashar – “voluntary mutual assistance and celebration” as compared to the former – “performance of work under the threat of any punishment”[9]. In fact, the difference in understanding of terms occurred substantially due to transformation of socio-economic and socio-cultural relations in the society, which started from the Soviet period and continued during the years of independence. The understanding of

[6] Warikoo. 2012. "TRADITION AND MODERNITY IN UZBEKISTAN THE ROLE OF MAHALLA IN LOCAL SELF-GOVERNANCE." *Himalayan and Central Asian Studies* 16 (3/4): 31.

[7] Abramson. 1998. "From Soviet to mahalla: Community and transition in post-Soviet Uzbekistan." *PhD Dissertation* (Indiana University).

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[9] Gazeta.uz. 2019. *Глава Минтруда — о разнице между хашаром и принудительным трудом.* August 2. Accessed July 1, 2020. https://www.gazeta.uz/ru/2019/08/02/khashar/.

massive labour as communal and voluntary was much closer to the traditional essence of Uzbek khashar in the Soviet period rather than during the years of independence. In the post-Soviet Uzbekistan, the activities of mahalla and *khokimiyats* (city administration) discredited themselves as pro-civilian bodies and turned into part of the state bureaucratic system in the eyes of ordinary citizens.

As Abashin suggests, political elites throughout the history often tried to handle mahalla to enforce their own legitimacy[10]. The tendency to keep the grip on self-governing bodies in order to control the masses and monitor public sentiments, strengthened in post-Soviet Uzbekistan under Karimov. The authorities used mahalla to monitor and control the public dissatisfaction. In turn, mahalla has been seen by locals as part of the political authorities and surveillance rather than indigenous system of social organization. Partly, the post-Soviet mahallas repeat the functions of Soviet mahallas, undermining the collectivist essence of the communal activities in an attempt to pursue the state propaganda. This happened mostly because the Soviet and post-Soviet mahallas were and have been heavily controlled by the state and applied the top-to-bottom approach even to those activities that previously were seen as communal.

In the Soviet period mahallas had functions to monitor the taxes paid by the population, while the post-Soviet mahalla was responsible for issuing various certificates on absence of debts for utilities, on residence registration and other issues accounting for bureaucratic organizational structure. From 2018 and up to 2020 the procedures of issuing certificates from local self-governing units of mahalla have been loosened significantly. From January 2020 the authority to issue about 28 certificates by mahalla units was

[10] Abashin. 2014. "Советский кишлак: между колониализмом и модернизацией." *Новое литературное обозрение* 223-239.

abolished and transferred to an electronic platform[11]. This partly eliminated the corruption component by mahalla staff across the country, which previously provoked a massive discontent. However, mahallas are still blamed for corruption cases since they maintain broad functions in distributing public welfare through public funds under their jurisdiction.

A group of authors claim, that the corruption cases within the mahalla system occur mainly due to low salaries of mahalla staff and also legal imperfections in defining the categories of people in need of social protection, and also lack of professional training in carrying those functions[12].

Distribution of Welfare

The social protection issue has become central since the collapse of the Soviet Union when the economic perturbations led to increase in number of socially vulnerable strata of people. The state tried to shift part of the burden to the mahalla structure by distributing welfare through a decentralized system of mahalla units. As Urinboyev states, “mahallas replaced the state as the primary provider of social guarantees and they provide extensive social services for community residents”[13]. The funds for child allowances, maternal payments, social payments for elders in need and allowances for poor households are allocated from various sources, including private donations to mahalla funds. However, the main source of funding comes from

[11] Gazeta.uz. 2019. *Почти 30 видов справок отменяются с 2020 года — список.* December 10. Accessed June 2020. Gazeta.uz.

[12] Dadabaev. (2013, July 1). Community life, memory and a changing nature of mahalla identity in Uzbekistan. Journal of Eurasian Studies, 4(2), 181-196.

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Alonso, Kalanov. (2017). The role of Khodjas and Mahallas in Uzbekistan: Tools for social stability? Revista UNISCI (45), 247-265

[13] Urinboyev. 2011. "Bridging the State and Society: Case Study of Mahalla Institutions in Uzbekistan." *Norms between Law and Society: A Collection of Essays from Doctoral Candidates from Different Academic Subjects and Different Parts of the World*, 115-133.

the public budget.

According to the report carried out by UNICEF in 1998, there were no clear-cut legal criteria for detecting those in need of social payments. Final decisions were made by subjective factors such as a visit of Commission members to houses of mahalla-residents, and rather informal factors of application process. Final decisions on citizens in need and the destitute are also fulfilled by the Commission within the mahalla administration, which also consists of local offices of the Ministry of Labour, the Tax Inspectorate, and the Ministry of Finance. The application process was called by the authors as decentralized and rather effective in terms of giving funds more to less better-off than well-off households[14]. The categories of those who are in need of social payments are defined by law[15].

The research made in 2019 by the World Bank found mahalla as the primary source of information for those who were applying for social payments in rural areas, but was less reliable in urban areas[16]. The same report suggests, that formal criteria of assessment of eligibility during the application process is not always effective, and families in need may be excluded before the visit of the Commission. The subjective criteria during the application process include: number of households living in one house, availability of a farming land (includes *tomorka* - a plot of land near the house) and an informal income. The visit of the Commission to the households remains the final step for making decision. During the visit, the members of

[14] Coudouel, Marnie, Micklewright . 1998. *Targeting SOcial Assistance in a Transition Economy: The Mahallas in Uzbekistan.* Innocent Occasional papers, Economic and Social Policy Series, UNICEF, Siena: UNICEF.

[15] Norma.uz. 2013. "ПОЛОЖЕНИЕ о порядке назначения и выплаты социальных пособий и материальной помощи малообеспеченным семьям." *norma.uz.* February 2. Accessed June 06, 2020. https://nrm.uz/contentf?doc=286978_polojenie_o_poryadke_naznacheniya_i_vyplaty_socialnyh_posobiy_i_materialnoy_pomoshchi_maloobespechennym_semyam_(prilojenie_n_1_k_postanovleniyu_km_ruz_ot_15_02_2013_g_n_44)&products=1_zakonodatelstvo_respubliki_uzbekista.

[16] Honorati. 2019. *Uzbekistan-Social Assistance Targeting Assessment.* Social Assistance Targeting Assessment, Washington, D.C.: World Bank, 1-38.

the Commission can open the refrigerator, assess the availability of home appliances, while “also specific importance is attached to the type of entrance of the main dwelling as a proxy to determine household living standards”[17]. The overall conclusion is that the decisions are made fairly since the critical amount of the budget for social assistance is received by the poorest, but with significant errors leaving eligible families excluded.

The register of families in need is fulfilled through a system of *“Temir Daftar”* – Iron Notebook. The system embraces the families with financial needs, helps to provide with loans and credits, and assists with employment. The register is believed to be a more comprehensive system, which separately includes women in need through “Women’s Notebook” and youth through “Youth Notebook”.[18] The selection process remains roughly the same, despite considerable annual budget increase (in 2022 state funding almost doubled from 17 million USD to around 34 million)[19].

Mahalla’s Social Role During the COVID-2019 Crisis

Mahalla’s capacity for social protection of disadvantaged is broad since it positions itself as an indigenous institution with dominating culture of mutual assistance and “has a big capacity of decision in the allocation of public funds”[20]. However, during the socio-economic crisis resulted from the COVID-2019 lockdown mahalla funds have been spotted with numerous corruption cases and theft[21]. (Gazeta.uz 2020, Gazeta.uz 2020) The “official”

[17] Ibid. p.18

[18] Advice.uz, Что такое "Железная тетрадь"? Published at: https://advice.uz/ru/document/2393

[19] Kun.uz (2022), Государственный бюджет на 2022 год: сколько средств, и каким ведомствам будет выделено? Published on January 01.15.2022 at: https://kun.uz/ru/news/2022/01/08/gosudarstvennyy-budjet-na-2022-god-skolko-sredstv-i-kakim-vedomstvam-budet-vydeleno

[20] Alonso, Kalanov. 2017. "The role of Khodjas and Mahallas in Uzbekistan: Tools for social stability?" *Revista UNISCI* (45): 247-265.

[21] Gazeta.uz. (2020, May 18). Выявлено хищение средств из благотворительных фондов. Retrieved May 2020, from https://www.gazeta.uz/ru/2020/05/18/appropriation/

mahalla staff have been accused of assignment of public funds raised for charity puproses. This raises the issue of transperency since the key argument for indigenousness of the mahalla institution is trust by the ordinary people. The discredited image of mahalla appeared since the strong officialization and formalization of the institution from the Karimov's era. The more officialized, the less credible have become the mahalla before the eyes of ordinary members. Low-level bribery while issuing certificates and high-level thefts in allocation of funds have undermined trust to the mahalla over the years of independence.

During the COVID-2019 outbreak a massive sporadic movement of volunteers occurred in social media since March 2020. The individual activists accumulated big sums of money for charity purposes to assist the disadvantaged across the country by creating Telegram channels and attracting volunteers. However, the state apparatus attempted at keeping the official grip on volunteer activity and centralised the charity process. According to the decision of Special COVID Committee in April, the volunteer activity was transrerred under the jurisdiction of the Ministry of Mahalla and Family, and was organized in compliance with the rules and restrictions of the lockdown period, such as: issuing movement-allowing stickers for charity automobiles, checking availability of medical masks and special equipment. The massive charity embraced small and medium business representatives, big corporations, ordinary citizens and public figures eager to help to the disabled, elderlies, poor families with small children[22]. The assistance included mainly food packages and financial aid to the targeted households. The lists later were compiled by the mahalla units, and later detected by the

Gazeta.uz. (2020, July 7). Выявлено хищение средств из фонда «Махалла» в Сергели. Retrieved July 2020, from https://www.gazeta.uz/ru/2020/07/07/money/

[22] Fergana.ru. 2020. *Что разносит волонтер.* April 2. Accessed May 2020. https://fergana.ru/articles/116650/.

volunteers themselves. The social discussions demonstrated that the centralised intervention of the state partly paralyzed the individual activism, while the second wave of the lockdown witnessed much less individual initiative, considering the corruption cases within the mahalla system.

Demolitions in post-Karimov era and the role of Mahalla (Tables 1- 3)

The survey on the role of mahalla in massive demolitions of private property in Tashkent was conducted in the Facebook group “Ташкент - Сносы” (Tashkent - Demolitions)[23]. The target group was chosen according to the number of participants in the group (21K) and the discussed issues closely related to demolitions of private property. The questions in the survey were constructed in the way to determine the role of the mahalla units during demolitions, and to further conclude about structural problems within the relationship of market/business and mahalla.

The massive demolitions have started since 2017 and been continuing in all the regions of Uzbekistan until present days. The issues of legal controversies occurred almost in every case, and even provoked massive discontent and protests[24]. The private houses and backyards have been demolished for the sake of business projects, and sometimes even small and medium business properties for the sake of large-scale projects. The demolitions have become possible due to licenses issued by khokimiyats of territorial units to developers. In majority cases the licenses were given without informing the property owners. The survey included questions on position of mahalla units in individual cases of demolitions, the methods which the property owners implied to protect their rights, the role of mahalla

[23] https://www.facebook.com/groups/328799110874813/?ref=share

[24] FH. 2020. *Nations in Transit:Uzbekistan 2020.* Annual, Freedom House, Washington, D.C.: Freedom House.

in protecting the rights of people in legal procedures, and the overall level of satisfaction with the mahalla units' actions during the demolitions.

70 people took part in the survey, and 76 percent of the respondents stated that the mahalla took the side of developers, 38 percent said that the mahalla openly protected the developers, some of the respondents answered that the mahalla committee leaders collaborated with developers, interfering against legal means of justice. According to the absolute majority of answers, the ordinary citizens and property owners appealed for legal methods of justice, writing petitions, calling for legal expertise, applied to the President's Online Portal, Prosecutor's office, courts and etc. About 98 percent of respondents were highly dissatisfied by the actions of their mahalla units.

Conclusion

The present article makes an attempt to analyse the current socio-political role of the *mahalla* - former self-governing structure with long history. Its role was analysed in the context of the current social transformations the Uzbek society is undergoing, being not merely a part of the civil society, but a state structure. The article also analyses the logic behind the state's actions to enforce the mahalla with its ubiquitous presence in the life of people, and the growing discontent of ordinary people with the structure, which is not any-longer perceived as an indigenous cultural entity. The mahalla should be analysed as a state agency dependent on state budget, and the structural deficiencies of which are also part of the overall governance-related setbacks. Over its long history the mahalla has been monopolized by the government, while only in recent years it has turned into an explicit full-fledged state structure, completely diminishing its self-governing nature.

Appendix

Survey: https://docs.google.com/forms/d/1FUL3CXJIXURupR6BwPo8rlt-MAm-TEWzJCtw_00AnS4/edit#responses

Figure 1

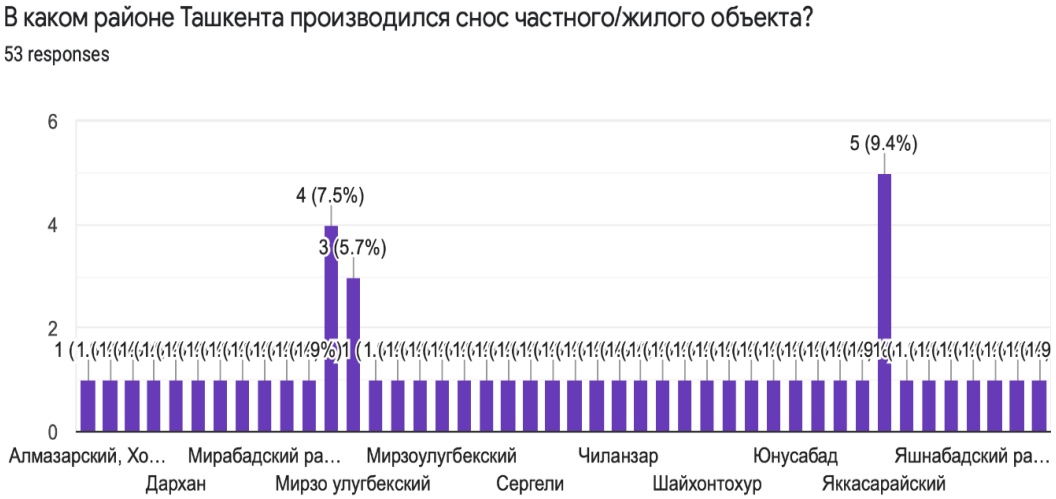
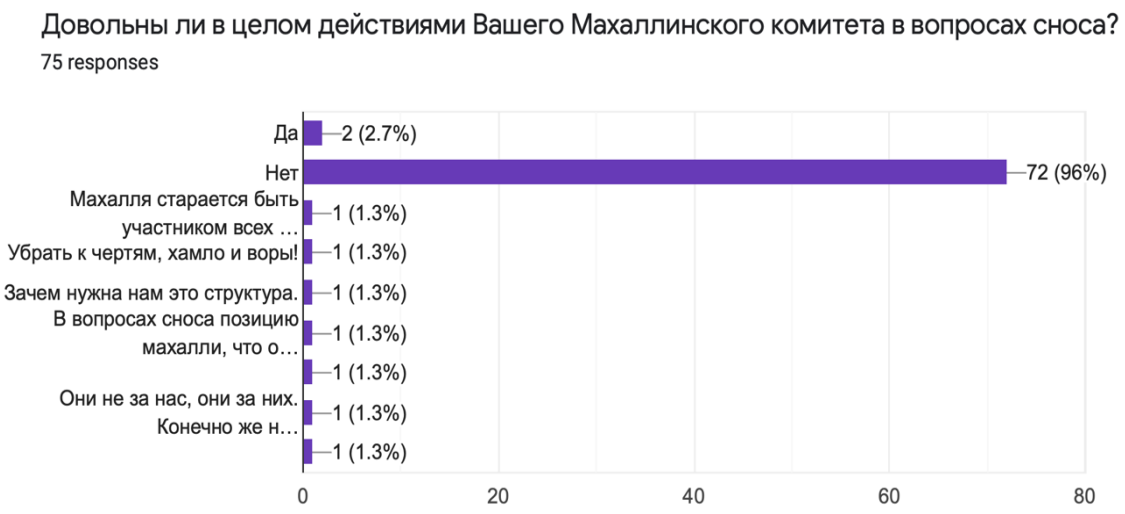


Figure 2

Figure 3



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Mahalla. Its role in the democratization of society

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Abstract: This paper is devoted to the civil society institution – mahalla and its participation in public administration in modern Uzbekistan. The history of the development of self-government body and their involvement in the political processes of the country. The article uses a combination of different methods: the historical, comparative, and factual basis of the study are normative acts. Particular attention is paid to the dynamic development of the mahalla institution in the Republic of Uzbekistan. The author analysed the features and results of new reforms in Uzbekistan in recent years, that were undertaken through legal means.

The scientific work presents some proposals for enhancing the socio-political activity of mahalla, strengthening their role in managing the state and society. The core of this research is the search for ways to harmonize citizens' self-government to human rights and freedoms.

Introduction

The experience of state-building and management in the East has certain features. Today, as in ancient times, *mahalla* is a community of people connected not only by neighbourly relations but also by centuries-old traditions and customs. The form of socio-economic integration of the population has changed in the course of historical development.

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Mahalla has always been the centre of public opinion, the preservation of national values, and the solution to urgent life problems. The President called the mahalla "*a unique democratic structure in the world*" and noted that its powers would be expanded. At a meeting on the implementation of the Development Strategy of New Uzbekistan[1], Shavkat Mirziyoyev again emphasized, "*To achieve this goal, we set ourselves the task of effectively using the capabilities of the mahalla institution, a democratic structure unique in the world, further expanding its powers in order to ultimately turn the mahalla into a decisive link in our society. If peace reigns in the mahalla, it will be peaceful in the country. If the mahalla is well-maintained, then the whole country will be well-maintained*.[2]" The necessary condition for the sustainable development of the country is the existence of a system of self-government. These bodies are very important for Uzbekistan compared to most foreign models of government.

Historical facts about Mahalla

Mahalla is the most ancient and unique structure which incorporates the traditional values of the Uzbek people, providing spiritual and social support to its residents. The experience of state-building and its management has always had its own peculiarities on the continent of Asia and in the Muslim East. Long before the Arab conquest and the adoption of the Islamic religion, Mahalla existed as a Union of People living in a certain area where they were connected not only by neighbourly ties, but also by spiritual and ethical norms, customs, and ancient traditions, and internal regulations established for centuries[3]. Although the name of Mahalla was granted to self-governing

[1] Decree of the President of the Republic of Uzbekistan on the Development Strategy of the New Uzbekistan for 2022-2026. URL: https://lex.uz/ru/docs/5841077

[2] "Mahalla is a unique democratic structure in the world" – President. URL: https://www.gazeta.uz/ru/2022/01/27/strategy/#

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territories after the conquest of the Arabs, this concept stands for a community of citizens. Everyone had the opportunity to take the initiative in solving various public interest-related issues. People actively used their right to tackle the gardening of their territory, assistance to the poor, and education of the younger generation. Through the Mahalla, reforms of different aspects of the socio-economic, political, and cultural life affected many Uzbek[4].

Mahalla is a historically unique form of self-governance of the Uzbek people in the framework of the traditional national social system. Through Mahalla the indigenous population retained social and economic relationships, respect for social traditions, and ethical principles in their relationships. This guarantees the unquestioning fulfilment of obligations and responsibility to society. Even under totalitarian Soviet control, the population sought to preserve the national and traditional properties of Mahalla[5].

Since its independence, in 1991, Uzbekistan has begun a new stage in its history, including the development of the institution of Mahalla. Mahalla acquired constitutional status in the form of a self-governing body of citizens. Thus, the Constitution of the Republic of Uzbekistan (Article 105) recognizes and guarantees the self-governance of citizens and establishes the capability of independent action within its powers. The most important principle in the creation and implementation of public governance is a self-governing body, which can resolve problems at the local level and has responsibility for its population.

The numerous areas of activity, the size of the residential population, and satisfying the socio-economic, spiritual, educational, political, and ideological needs of the population converted this body of citizens' self-

is an independent state. - T.: *Adolat*, 1995. - Pp.142-143.

[4] *Gayupova Sh*. Democratic processes in traditional Uzbek mahallas // Materials of the Republican scientific conference of young scientists dedicated to the 60th anniversary of the Academy of Sciences of Uzbekistan. - T., 2003. –Pp.142.

[5] *Ismailova G*. Mahalla – a citizens' self-government institution // From a Strong State to a Strong Civil Society. Global Scholarly Publications. New York, USA. 2014. -Pp. 151-162.

governance into a conduit of citizen power in the field. The self-government of citizens and civil society organizations constitute the foundations of civil society. In civil society, the state and government, public and non-governmental associations, all have their individual tasks, they complement each other and ensure the viability of a developed democratic society.

Mahalla is an important component of citizens' civil society; it is indeed a direct mechanism of democracy. It is the basis of self-governance that enables citizens to influence public authorities to create a system where governmental and local interests are balanced. The transfer of some state responsibilities from the government to Mahalla indicates a serious attitude towards these bodies of self-governance. Self-governing bodies do not limit the coverage of citizen involvement but ensure the participation of citizens in the protection of legal rights, state management, and public affairs.

National normative framework of self-government body

Self-government bodies are important primarily as a structure that is in direct contact with the population. They should be a part of a management chain and the main source of information.

The current legislation entrusts the mahalla with making the solution to many tasks of great social importance. It ensures the targeted and efficient use of funds allocated as part of social support for families, resolves issues of providing material assistance to the needy, assigning and paying allowances to families with underage children. The mahalla is designed to facilitate the implementation of patronage of lonely elderly citizens in need of outside care at the expense of funds allocated from the State budget. Today, self-government bodies are entrusted with a number of powers in the field of preserving marriages and reconciling the conflicting parties in them. In the mahallas, various issues of integrated socio-economic and cultural

development of the territory under their jurisdiction are resolved. Here they can effectively mitigate the consequences of conflicts, provide assistance to less-protected segments of the population, and improve general conditions and quality of life. Therefore, nationwide, the self-government of citizens solves problems of national importance, ensuring the protection of interests of the people. This level is the foundation of the national system of democracy.

According to the Constitution of the Republic of Uzbekistan[6], people are the only source of state power; they practice their governance through public authorities or bodies of self-governance. One of the priorities of state policy in the Republic of Uzbekistan is the further development of citizen self-governance. Regarding this issue, of course, great importance is given to the newly adopted laws of the Republic of Uzbekistan “On self-government bodies” and “On the election of the citizen's Chairmen (*Aksakal*) and his advisers” in the implementation of socio-economic development programs, solution of humanitarian problems, protection of rights, freedoms, and interests of various segments of the population. Special importance is given to further improvement of organizational foundations of Mahalla as an institution of self-governance, extending its functions and providing close interaction with the state and governmental bodies'.

In the recent years, a lot of consistent work has been carried out to support non-governmental non-profit organizations and other institutions of civil society such as strengthening the social partnership between them and state bodies, implementing effective public control, and improving the legal framework governing this area.

The “Concept for the development of civil society in 2021-2025”[7]

[6] The Constitution of the Republic of Uzbekistan. URL: https://lex.uz/en/docs/4032775

[7] Decree of the President of the Republic of Uzbekistan on the Approval of the Concept for the Development of Civil Society in 2021-2025. URL: https://lex.uz/docs/5319760#

adopted by the President of the Republic of Uzbekistan marked a special significance in ensuring the further development of civil society institutions, strengthening their role in guaranteeing the transparency and efficiency of the reforms. The objectives of the Concept for the Development of Civil Society in 2021-2025 are the further development of a free civil society in the country, the protection of human rights and legitimate interests, democratic values, increasing the political culture and legal awareness of the population, strengthening social partnership and cooperation in resolving pressing issues between state bodies and non-governmental non-profit organizations, increasing the initiative and activity of non-governmental non-profit organizations in ongoing reforms in the republic in all areas.

Self-governance of citizens is the closest to a populist power institution that protects the rights of citizens in the territory they live. Therefore, the self-governance of citizens is a strong foundation of a democratic system. At the same time, the self-governance of citizens is recognized and guaranteed by the state and its main task is resolving problems of local importance and ensuring the daily needs of all the population.

Modern trends of Mahalla in Uzbekistan

As a result of the implementation of active reforms, development of entrepreneurship, and work in the context of mahallas, last year the gross domestic product of our country increased by 7.4 percent and 100,000 new entrepreneurs have started their activities in the regions. The number of self-employed increased by 700 thousand and reached 1.2 million people.

The President of the country declared 2022 – the Year of Ensuring Human Interests and Development of the Mahalla[8]. Therefore, fundamental

[8] 2022 has been declared the Year of Ensuring Human Interests and Development of the Mahalla. URL: https://www.gazeta.uz/uz/2021/12/31/2022-year/

changes should take place in all mahallas this year, the head of state noted. Since the beginning of the year, the Centres for “Mahallabay” Work and Entrepreneurship Development have started to function.

Citizens' self-government bodies play an important role in addressing the issues of state social support of the population, in the provision of various forms of assistance and services, in the allocation of benefits and other forms of material aid, as well as employment opportunities for the unemployed. Mahalla can provide precise information on the issues of the conditions a particular resident lives in, and his or her need for assistance. Mahalla adheres to the principles of fairness in the provision of aid. This provides for effective execution of the government function of social protection.

Mahalla serves as a centre of social support to vulnerable groups within the population that assures intended and efficient use of government allocated funds and resources as well as involving youths from disadvantaged families – in cooperation with government organs, citizens' self-government bodies, banks, non-governmental non-profit organizations and other institutes of civil society. The expansion of Mahalla's functions implies the formation of social partnerships with public authorities, addressing social tasks jointly with government bodies, business structures, and non-governmental non-profit organizations, as well as citizens' self-government bodies. A country's stable development and the alignment of different interests are achieved through a joint effort. In this regard, the physical territory, neither social work nor the social sphere, serves as a ground for the establishment of such relationships.

The key objective of such a partnership is the development of complex programs and plans for the socio-economic development of the territory belonging to the Mahalla, and their implementation in alignment with the interests, historical customs, and local values of the community. The task of economic development is not the primary goal of citizens' self-government

bodies. Typically, finding effective solutions for the social problems of households begins by addressing cultural and social needs. Economic and administrative procedures in citizens' self-governing bodies are necessary to create new jobs and draw in financial resources.

Nowadays local self-government is seen as a certain assurance of a free regime. And the implementation of its principles is based on the traditions of the national school that guarantees not only the formation of democratic positions in our society but also ensure the sustainable socio-economic development of the country as a whole.

Today, public administration practices have indicated the importance of problems, which include the issues of the mahalla institution. The main task is to substantiate the political expediency of measures, the implementation of which will make it possible to organize the structure and activities of public authorities and the self-government of citizens in a more efficient way.

One of the most important tasks of improving national statehood at the present stage is the reform of the mahalla institution. The democratic structure determines the self-organization and self-development of each territorial entity, and eventually the state as a whole. The self-government of citizens is an inseparable part of democracy, which is inextricably linked with the exercise of power. That is why in our country, which is confidently moving along the path of forming a strong rule of law, and fair civil society, the role and importance of the mahalla as a system of democratic governance is increasing. Regulation of the system of self-government of citizens today is one of the main priorities of the state policy of Uzbekistan. The goals outlined in the Decree of the President “On measures to improve the socio-spiritual atmosphere in society, further support for the mahalla institution, as well as raising the system of work with families and women to a new level”[9] dated

[9] The Decree of the President On measures to improve the socio-spiritual atmosphere in society, further support for the mahalla institution, as well as raising the system of work with families and women to a new

February 18, 2020, are of great importance.

The strategic tasks of the current stage of reforms are, first of all, in building a democratic state, further deepening the processes of formation of civil society and a market economy, rigorously, consistently, and firmly fixing democratic values in the minds of people. Modern state policy in this direction has set the goal of turning the mahalla institution, which is a unique social structure of society, into real support and a real helper for the population. It is the mahalla that plays an important role in supporting the social activity of women, strengthening their place in society, strengthening guarantees for the protection of their rights and legitimate interests, fundamentally reforming the organizational and legal mechanisms for ensuring a healthy and stable socio-spiritual atmosphere. The work of citizens' self-governing bodies is one of the factors that ensure the conscious and active participation of people in the process of implementing large-scale reforms.

For Uzbekistan, the formation of the Ministry for Support of Mahalla and the Family, in 2018 was a progressive step in support of the mahalla institution. The central tasks of the department were comprehensive assistance in the full-fledged formation of a socio-spiritual environment in society, carrying out a unified state policy to strengthen the institution of the family, ensuring comprehensive support for women, developing proposals to improve the activities of citizens' self-government bodies, protecting their rights and legitimate interests, as well as improving the mahalla system. The new ministry has its aims which correspond to the ideas of a modern democratic state, where the highest value is a person, his/her rights and freedoms.

The Ministry for the Support of the Mahalla and the Older Generation has been established in order to raise the system of work with families,

level. URL: https://lex.uz/ru/docs/4740345

women, and representatives of the older generation to a new level and to improve support for mahallas as well as organize their work effectively and ensure the interaction of people responsible for the work of “mahallabay” by the Decree of the President dated by March 1, 2022, on the basis of the Ministry for the Support of the Mahalla and the Family.

Conclusion

Analysis of the activity of Mahalla yet again proves its importance as an institution of civil society. Implemented reforms have increased the role of the Mahalla in social life and transformed it into an active party of public control and social partnership.

The goal of citizens' self-government is to harmonize human rights and freedoms with the interests of the state and society at the level of each individual. In local environments, it is possible to ensure the realization of the needs of citizens and take into account specific historical, cultural, geographical, and other features. Only in this way does the population recognize the direct responsibility for solving pressing life issues, that is, the basics of understanding responsibility for one’s own destiny.

Implementation of the founding principle of citizens' self-governing bodies based on national traditions not only guarantees the restoration and development of democratic Uzbek society but also secures stable socio-economic development. In the case of Uzbekistan, in broad terms, citizens' self-government bodies demonstrate people's solidarity, the union of all participants of a community in solving common problems regardless of their social background, nationality, and religious affiliation.

The Head of State has launched full-scale reforms aimed at developing democratic principles in the formation and operation of institutions of state power and the self-government of citizens. The transformation of democracy

from a formal attribute of the state into a real political and legal institution and a mechanism that ensures the social legitimacy of the government creates prospects for its development and further reform. But one thing is for sure: the course taken to approve a new institution of democracy in Uzbekistan is irreversible.

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6. The Constitution of the Republic of Uzbekistan. URL: https://lex.uz/en/docs/4032775
7. Decree of the President of the Republic of Uzbekistan on the Approval of the Concept for the Development of Civil Society in 2021-2025. URL: https://lex.uz/docs/5319760#

8. 2022 has been declared the Year of Ensuring Human Interests and Development of the Mahalla. URL: https://www.gazeta.uz/uz/2021/12/31/2022-year/
9. The Decree of the President On measures to improve the socio-spiritual atmosphere in society, further support for the mahalla institution, as well as raising the system of work with families and women to a new level. URL: https://lex.uz/ru/docs/4740345

Digital Connectivity in Central Asia: Prospects for Regional Cooperation

Farrukh Khakimov*

Abstract: The role of digital technologies and the importance of effective informatization policy have been well actualized since the beginning of the global COVID-19 pandemic. Especially, for Central Asian States (CAS) – Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan digitalization have a potential to modernize and integrate national economies into the global economy, overcome major constraints, ensure digital upgrade and build information society for the benefit of population in post-pandemic recovery period. Under these circumstances, CAS intend to improve their digital connectivity and policy reforms in order to prevail over current and future challenges. In this regard, the current processes of digital transformation in the region have been analysed by focusing on national digitalization strategies of CAS in the context of digital responses to the global pandemic. Moreover, based on findings concerning limits and problems of hindering digital development in Central Asia, policy recommendations have been presented on reasonable digitalization policy and regional cooperation the digital sphere.

Introduction

The global pandemic has demonstrated the power of digital technologies and highlighted the importance of digital transformation, especially, for CAS.

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Currently governments, societies and businesses across the world are able to function mostly with the help of digital technologies. Indeed, “beyond ensuring continuity and connectivity, digitalization sets the foundation for a more resilient and inclusive economic transformation.”[1] Consequently, most countries both advanced and developing countries are improving their digitalization and digital transformation policies to overcome challenges and recover from the negative effects of the global pandemic. According to the World Bank estimates strong connectivity infrastructure can mitigate up to 50% of the negative economic impacts of the pandemics. In addition, 10% increase in broadband connectivity can add at least 1% to economic growth of the country, and a 1% increase in internet connectivity can boost exports by 4.3%.[2]

Figure 1. Internet penetration rate in CAS 2020-2021

№	Country	The UN E- Government Survey 2020	DataReportal 2021	Official statistics of CAS 2021
1	Kazakhstan	**78.9**	**81.9**	**84,2**
2	Kyrgyzstan	38	50.4	**70**
3	Tajikistan	21.96	34.9	**40**
4	Turkmenistan	21.25	33.2	**35**
5	Uzbekistan	**55.2**	**55.2**	**78**

Source: Compiled by author based on data from “The UN E-Government Survey 2020”, “DataReportal” and Official data from the Governments (The Ministry for Development of Information Technologies and Communications of the Republic of Uzbekistan, Ministry of economic development and trade of the Republic of Tajikistan, Electronic government of the Republic of Kazakhstan, State committee on Information and Communication Technology of the Kyrgyz Republic)

[1] Tang, Jiawen and Begazo, Tania (2020). “Digital stimulus packages: Lessons learned and what’s next”. The World Bank Group. Published on 17.12.2020 at: https://blogs.worldbank.org/digital-development/digital-stimulus-packages-lessons-learned-and-whats-next

[2] Burunciuc, Lilia (2021). “How Central Asia can ensure it doesn’t miss out on a digital future”. The World Bank Group. Published on 21.06.2021 at: https://blogs.worldbank.org/digital-development/digital-stimulus-packages-lessons-learned-and-whats-next

In this regard, it is very right time to reflect on the benefits and challenges which global pandemic brought concerning digitalization in Central Asian region, explore where Uzbekistan and other CAS stand in their digital journey and compare National digitalization strategies of CAS.

Research design and methodology

The research design of the paper applies mixed methodological approaches such as qualitative and quantitative.

Qualitatively, secondary sources like books, journal articles, previous research works and primary sources like national legislation (national strategies and programs), official statements, speeches, international and governmental publications have been utilized.

Quantitatively, in order to assess current digital readiness of Central Asia, their national digitalization strategies have been comparatively studied based on statistical data derived from a large panel dataset from the United Nations E-Government Survey 2020, including E-Government Development Index, Telecommunications Infrastructure Index, E-Participation Index. In addition, several reports and charts from the “DataReportal” – open-source informational platform have been applied to evaluate capacity for digital transformation in given countries of the region.

Aims and objectives of the research

Basically, CAS prioritized digitalization and development of information-communication technologies (ICT) to modernize national economies and society yet in early 2000es. For instance, Uzbekistan has been implementing an integrated program of National Information and Communication System Development 2013-2020, the National Action Strategy on Five Priority

Development Areas 2017-2021, the “Digital Uzbekistan – 2030” Strategy and other national programs to implement digital transformation in national economy, industry and society in general. Similarly, all other CAS have their national digitalization programs named as “digital strategy” (Kazakhstan and Kyrgyzstan) and “concepts of the digital economy” (Tajikistan and Turkmenistan) which set several ambitious targets for coming decades.

However, according to experts, all CAS have very similar challenges and obstacles during the implementation of national digitalization strategies. Hence, there is a need to ensure effectiveness of ongoing various programs and reforms in CAS and improve processes of digitalization by applying suitable best foreign practices.

In this regard, the main purpose of the research paper is to conduct a comparative analysis of the current state of digitalization processes in CAS and their national digitalization strategies under the impact of the global pandemic, which has revealed certain vulnerabilities and challenges in the sphere. The research paper also aims to develop policy recommendations to improve the implementation of national strategies of CAS on digitalization and ICT in post-pandemic world.

National digitalization strategies of CAS

CAS prioritized digitalization and development of ICT to modernize national economies and society yet in early 2000s. Similarly, all other CAS have current national digitalization programs *(Figure 2)* that titled as “Digital Strategy” in three out of five countries: “Digital Kazakhstan” 2018-2022; “Digital Kyrgyzstan” 2019-2023 and “Digital Uzbekistan – 2030”.

Whereas Tajikistan and Turkmenistan prioritized their digital transformation programs in the framework of broader national development and/or digital economy programs. For example, “Concept of the digital

economy in the Republic of Tajikistan" which is derived from "the National Development Strategy of the Republic of Tajikistan for the period of 2030." Turkmenistan's digitalization is based on the "Concept for the development of the digital economy of Turkmenistan in 2019-2025." These ambitious national programs and strategies are mostly focused on developing digital economy and improving ICT infrastructure of CAS.

Figure 2. Main Documents Regulating the Development of the Digital Economy and Digitalization Programs in CAS

№	Country	National Programs	Goals and Directions of Digitalization
1	Kazakhstan	Digital Kazakhstan **2018-2022**	• Digitalization of economic sectors; • Transition to the digital state; • Implementation of the Digital Silk Road; • Development of human capital; • Creation of an innovative ecosystem.
2	Kyrgyzstan	Digital Kyrgyzstan **2019-2023**	• Creating new opportunities for the population through the development of digital skills • Providing high-quality digital services, improving efficiency, productivity, transparency and accountability. • Ensuring economic growth through the digital transformation of priority sectors of the economy, strengthening international partnerships and creating new economic clusters.
3	Tajikistan	The Concept of the Digital Economy *The concept is based on the National Development Strategy of the Republic of Tajikistan for the period up to 2030*	• Strengthening the regulatory framework and state policy in the field of introduction of new technologies; • Creation of modern digital infrastructure and provision of ubiquitous broadband access; • Development of modern communication systems; • Creation of data centres and digital platforms; • Digitalization of the social sphere, energy sector, agriculture; • Creation of new sectors, such as financial technology;

			• Digitalization of the National Bank of Tajikistan. • Training of qualified personnel; • Creation of a digital transformation management model; • Determination of key targets for the success of digitalization; • Information and educational support of digital transformation.
4	Turkmenistan	Concept for the development of the digital economy of Turkmenistan in 2019-2025.	• Creation of a state-authorized interdepartmental commission; • Development of the Program and the “Roadmap” for Digital Economy; • Monitoring of the technical base of business entities to prepare for digitalization; • Improving material, technical and legislative basis; • Improving digital qualifications of personnel. • Comprehensive implementation of digital communication systems; • Development of the "One Window" service. • Implementation of digitalization projects in the sectors of economy. • In the telecommunications industry, modernization is planned with the use of 3G, 4G, and in the future 5G high-speed Internet and other services.
5	Uzbekistan	Digital Uzbekistan 2030	**Digital transformation of** • regions; • industries; **Development of** • public administration; • public services to the population and business entities; • e-government; • digital economy; • digital industry; • digital education; • digital infrastructure; • national digital technology market; • innovative products; • human capital and building digital skills; • effective information security system

Source**:** Compiled by author based on data from official sources of Central Asian

governments such as The Ministry for Development of Information Technologies and Communications of the Republic of Uzbekistan, Ministry of economic development and trade of the Republic of Tajikistan, Electronic government of the Republic of Kazakhstan, State committee on Information and Communication Technology of the Kyrgyz Republic.

For the last decade Uzbekistan has implemented various programs and invested remarkable resources to modernize national ICT infrastructure. “Ongoing development goals also include improving the investment climate by reducing state regulation and assuring property rights.”[3]

Uzbekistan’s integrated program of National Information and Communication System Development 2013-2020, the National Actions Strategy 2017-2021, the Development Strategy of the New Uzbekistan for 2022-2026, the “Digital Uzbekistan – 2030” Strategy and other national programs aim to implement digital transformation of national economy, industry and society in general. “The Uzbekistan government already recognized the power of digitalization in transforming society, but the COVID-19 pandemic has made that transformation essential.”[4]

Adoption of the “Digital Uzbekistan – 2030” Strategy and the “road map” for its implementation in 2020-2022 creates, first of all, a legal basis for the transition to a digital economy. The document includes such priority areas as the development of digital infrastructure, e-government, the national digital technology market, education and advanced training in the field of information technology.

Among expected results of “Digital Uzbekistan – 2030” Strategy are high-quality and inexpensive Internet and mobile communications, a reduction in the digital divide between cities and villages, the dominance of

[3] Ergasheva, Amalia (2020). “How Uzbekistan is transforming into a digital society in the time of COVID19”. Published on 27.06.2020 at: https://www.orfonline.org/expert-speak/how-uzbekistan-is-transforming-into-a-digital-society-in-the-time-of-covid19-68640/

[4] Avliyokulov, Bunyod (2020). “Speeding up digital transformation to tackle COVID-19 in Uzbekistan”. Published on 19.08.2020 at: https://www.eurasia.undp.org/content/rbec/en/home/blog/2020/speeding-digital-transformation-uzbekistan.html

electronic recording and an intensification of the fight against corruption.[5]

The strategy considers approval of two programs: digitalization of regions and digitalization of industries. Thus, two approaches are considered - territorial and industrial. Undoubtedly it will provide the most comprehensive coverage and effective implementation of the document. The Strategy also contributes the implementation of other national strategic documents and programs and, first of all will be important for achieving the National goals and objectives in the field of the UN Sustainable Development Goals 2030.

Digital readiness of CAS: E-Government initiatives as an effective strategy toward digitalization

E-Government is considered as the main tool of digital transformation and the United Nations E-Government Survey[6] is the effective criteria to assess current readiness of a country for digitalization and digital transformation.[7] The United Nations E-Government Survey is also recognized as a key ranking, mapping and measuring tool of the digitalization processes in any country across the world.[8]

Indeed, the global pandemic renewed and anchored the role of E-Government – "both in its conventional delivery of digital services as well as new innovative efforts in managing the crisis". The global "pandemic has not only reinvigorated the role of digital government in its conventional delivery

[5] Abidkhadjaev, Umid (2021). "The Digital and Green Agendas of New Uzbekistan". Published on 07.12.2021 at: https://valdaiclub.com/a/highlights/digital-and-green-agendas-of-new-uzbekistan/

[6] The UN E-Government Survey, published by the UN Department of Economic and Social Affairs is prepared over a two-year period following an established methodology. It looks at how digital government can facilitate integrated policies and services across 193 UN Member States. The Survey supports countries' efforts to provide effective, accountable and inclusive digital services to all and to bridge the digital divide and leave no one behind.

[7] ElMassah, Suzanna and Mohieldin, Mahmoud (2020). "Digital transformation and localizing the Sustainable Development Goals (SDGs)". *Ecological Economics,* p. 169. https://doi.org/10.1016/j.ecolecon.2019.106490.

[8] 2020 United Nations E-Government Survey. UN Department of Economic and Social Affairs. Published on 10.07.2020 at: https://www.un.org/en/desa/2020-united-nations-e-government-survey

of public services and in ensuring business continuity, it has also brought about innovative ways in managing the crisis, such as in contact tracing, e-health, online learning, and remote working."[9] In addition, "the adoption of digital solutions has been a key factor underpinning the post-pandemic economic recovery, and the trend for rising digital inputs in manufacturing and services is expected to continue in the years ahead."[10]

Digital Government Transformation Dynamics in CAS

Regarding digital government transformation dynamics of in the region, it should be noted that overall, Uzbekistan and other CAS have made serious commitments to adopt the path of a democratic civil society. E-government reforms in the region made significant steps toward open governance, participatory democracy, and an inclusive society, firstly moving these elements to the agenda of administrative reforms.[11]

In the recent E-Government Survey-2020 ranking of CAS **Kazakhstan** is in 29th place with a very high EGDI - 0.8375, Kyrgyzstan was given 83rd position with a high EGDI - 0.6749, Uzbekistan 87th position also with a high EGDI - 0.6590 and the two trailing countries are Tajikistan 133rd with an average EGDI of 0.4649 and Turkmenistan 158th with an average EGDI of 0.4034.[12]

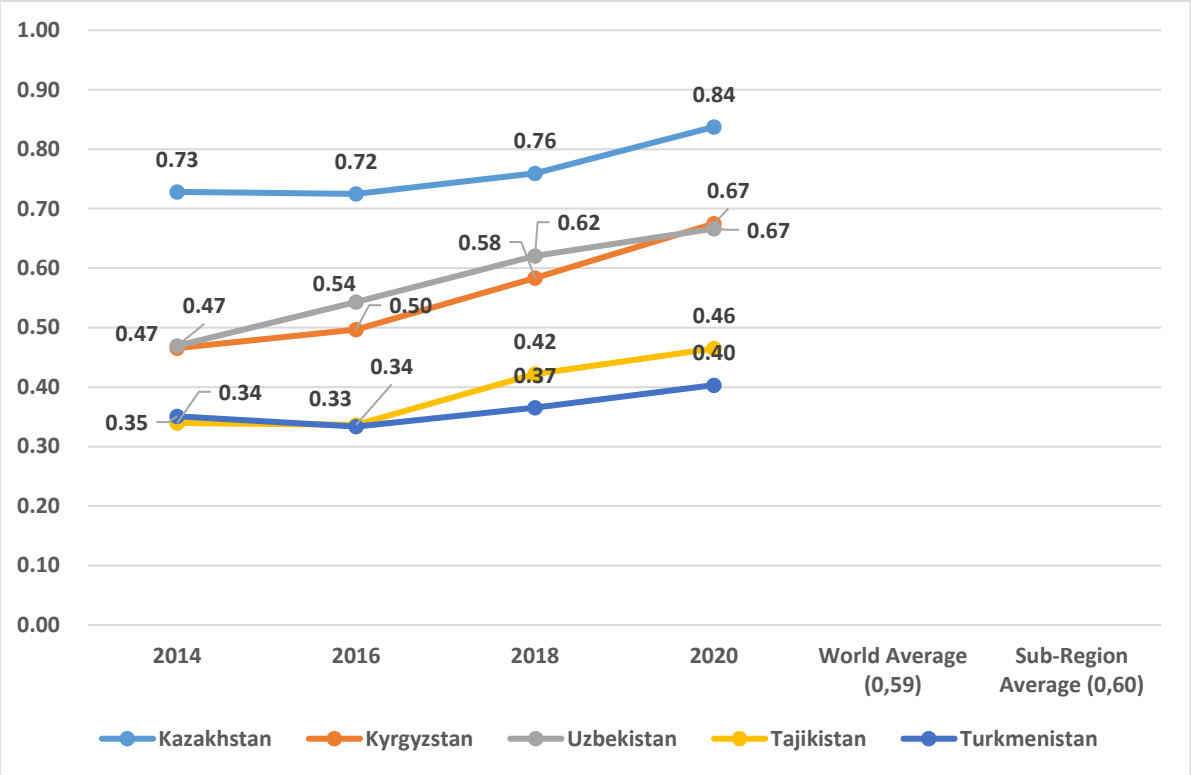
[9] 2020 United Nations E-Government Survey. UN Department of Economic and Social Affairs. Published on 10.07.2020 at: https://www.un.org/en/desa/2020-united-nations-e-government-survey

[10] Beirne, John (2022). "Harnessing digitalization on the path to sustainable economic development in Asia". Published on 27.01.2022 at: https://www.asiapathways-adbi.org/2022/01/harnessing-digitalization-on-the-path-to-sustainable-economic-development-in-asia/

[11] Kuldosheva, Gulnoza (2021). "Challenges and Opportunities of Digital Transformation in the Public Sector in Transition Economies: Examination of the Case of Uzbekistan". ADBI Working Paper 1248. Tokyo: Asian Development Bank Institute.

[12] The assessment of values reflected in the E-Government Development Index (EGDI) composite with three components: The Online Services Index (OSI), the Telecommunications Infrastructure Index (TII) and the Human Capacity Index (HCI). Countries in the low EGDI group have EGDI values of between 0.0 and 0.25, those in the middle EGDI group have values in the 0.25-0.50 range, countries in the high EGDI group have values of 0.50 to 0.75, and those in the very high EGDI group have values of 0.75 to 1.00

Figure 3. Digital Government Transformation Dynamics in CAS



Source: Compiled by author based on data from "The UN E-Government Survey" for 2014-2020

As a result of the analysis, a clear division was revealed according to the levels of development of digitalization in the Central Asian countries into three clusters:

1. Very high (EGDI> 0.75) - **Kazakhstan**.

2. High (EGDI from 0.5 to 0.75) - **Kyrgyzstan** and **Uzbekistan**. Achievement

3. Medium (EGDI from 0.25 to 0.5) – **Tajikistan** and **Turkmenistan**.

Figure 4. Central Asian countries in the UN E-Government Development Index 2018-2020

№	Country	Level of EGDI	Rank EGDI 2018	Rank EGDI 2020	Change
1	**Kazakhstan**	Very High	39 (0.7597)	29 (0.8375)	-10
2	**Kyrgyzstan**	High	91 (0.5835)	83 (0.6749)	-8
3	**Uzbekistan**	High	81 (0.6207)	87 (0.6665)	+6
4	**Tajikistan**	Middle	131 (0.4220)	133 (0.4649)	+2
5	**Turkmenistan**	Middle	147 (0.3652)	158 (0.4034)	+11
	World Average			**0.5988**	
	Region average			**0.6373**	
	Sub-Region Average			**0.6094**	

Source: Compiled by author based on data from "The UN E-Government Survey" for 2018-2020

Several scholars such as E. Johnson, B. Kolko, S. Maerz, M. Kneuer, and S. Harnisch assess critically e-government initiatives of CAS. They drew attention to expanding internet facilities (including e-government) in the Central Asian region, meanwhile, were sceptic that it could improve transparency and foster democratization. In contrast, these researchers proposed the hypothesis that in Central Asia "regimes set up e-government as a response to globalization pressures and to demonstrate modernity and legitimacy to the international community."[13]

According to Maerz e-government and/or e-participation indicators in the UN Surveys does not reflect real intentions and strategic motives of CAS's governments mainly because of methodological and conceptual problems.

However, along with requirements of current trend at global level and economic benefits the necessity of introducing e-government in the Central

[13] Maerz, Seraphine (2016). "The electronic face of authoritarianism: E-government as a tool for gaining legitimacy in competitive and non-competitive regimes". *Government Information Quarterly, 33*(4), 727-735.

Asian countries derived also from the high corruption levels in the CAS where implementing “e-government systems can decrease the level of corruption and improve the openness of governments for better service delivery to citizens.”[14]

Brimkulov and Baryktabasov has also pointed out several issues which “affect the result of e-government implementation initiatives such as the level of development of ICT infrastructure, citizen’s literacy in general and ability to use ICT in particular, the level of economic development, the level of legal framework development, political leadership etc.”[15]

According to the experts all of CAS have very similar obstacles and challenges at the implementation stages of e-government programs. The first category of barriers of e-government defined as “the digital divide, lack of qualifications and specific knowledge of civil servants, and citizens’ lack of IT skills”. In point of the experts, “low levels of income, insufficient development of ICT infrastructure, high price of Internet access, and insufficient education in IT skills” are main reasons of above-mentioned factors. In addition, corruption, the insufficient development of ICT infrastructure, ineffective coordination between state bodies for e-governance, low level of accountability and transparency, absence of evaluation and monitoring of ongoing projects, adequate financing of e-government projects, low level of information security and privacy were mentioned as the main factors of hindering e-government projects in Central Asian region.

[14] Brimkulov, Ulan and Baryktabasov, Kasym (2018). “E-government development in the Central Asian states: best practices, challenges and lessons learned”. In International E-Government Development (pp. 121-154). Palgrave Macmillan, Cham.

[15] Brimkulov, Ulan and Baryktabasov, Kasym (2018). “E-government development in the Central Asian states: best practices, challenges and lessons learned”. In International E-Government Development (pp. 121-154). Palgrave Macmillan, Cham.

Digital response to the global pandemic in CAS

Since mid-March 2020, official cases of COVID-19 have been registered in several countries of Central Asian region which later on began negatively impact various aspects of daily life of the societies and states. Obviously, not only the region, but also the most developed countries of the world were not ready for the challenges of the global pandemic. In fact, COVID-19 along with causing social and economic difficulties has revealed serious problems in healthcare systems, social protection policies and other fields of public sector of most countries.

In order to mitigate and fight against the health crisis many countries across the globe have initiated various instruments and online platforms such as information portals on COVID-19, online services for supply of medical facilities and goods, virtual and tele-medicine appointments. Moreover, some countries rapidly introduced COVID-19 tracing and tracking applications, and also remote working, learning and self-diagnosis applications. Global digital reactions to the COVID-19 pandemic have been categorized into such areas as “information sharing; e-participation; e-health; e-business; contact tracing; social distancing and virus tracking; working and learning from home; digital policy; and partnerships which differ throughout the countries depending on their digital and technological capabilities.”[16]

CAS along with general health and economic measures have accelerated the digitalization processes to enrich anti-crisis instruments and mitigate consequences of the global pandemic.

Regarding regional reactions to the global pandemic with digitalization measures, the report of the OECD on Central Asia has revealed that policy responses to the COVID-19 throughout Central Asian countries vary

[16] 2020 United Nations E-Government Survey. UN Department of Economic and Social Affairs. Published on 10.07.2020 at: https://www.un.org/en/desa/2020-united-nations-e-government-survey

significantly. Mostly Kazakhstan, Kyrgyzstan and Uzbekistan have increased digitalization measures whereas Tajikistan and Turkmenistan were reluctant due to certain factors. For instance, **Kyrgyzstan** "has further implemented digital initiatives and moved more than 80 government services online through the Tunduk initiative, while **Uzbekistan** has accelerated the development of online one-stop shops and other e-services. The government of Uzbekistan had also opened a call centre to help traders with their queries, and used the moment to expand digitalization in customs and trade procedures. These measures amounted to a concerted effort from regional policymakers to keep trade flowing."[17]

During the strict containment period in **Uzbekistan** and **Kazakhstan** government affiliated bodies (healthcare and law enforcement agencies) had practiced new technologies such as mobile tracking app and video surveillance technology to monitor self-isolation and wearing medical masks and other violators of the quarantine regime which demonstrated these countries relative advanced technological capabilities compared to other neighbouring countries although "safe" or "smart" city concepts are being implemented in capitals of **Kyrgyzstan** and **Tajikistan**.

However, the rapid reorientation of existing surveillance technologies toward public health-oriented uses by all CAS during the pandemic have been "heightening existing concerns of rights and privacy."[18]

In **Kazakhstan** the global pandemic has pushed for a massive transition to the digital environment as well. Ministries of Health and Internal Affairs of Kazakhstan have partially turned to technological solutions to mitigate the impact of the COVID-19 pandemic. The Smart Astana tracking app was

[17] OECD (2020). "COVID-19 crisis response in Central Asia." Published on 16.11.2020 at: https://read.oecd-ilibrary.org/view/?ref=129_129634-ujyjsqu30i&title=COVID-19-crisis-response-in-central-asia

[18] Putz, Catherine (2020). "Technology and Policing a Pandemic in Central Asia." *The Diplomat.* Published on 13.05.2020 at: https://thediplomat.com/2020/05/technology-and-policing-a-pandemic-in-central-asia/

recommended to monitor self-isolation of citizens. Whereas, in Almaty city "Sergek" video surveillance technology was used to control containment measures. "However, Kazakh authorities' experience of using surveillance technologies as a digital response for Covid-19 pandemic is not a new solution to the health crisis; they are utilizing existing technical capacities to deal with the problem after more conventional approaches fell short."[19]

Kyrgyzstan also had to pay special attention to digitalization of its healthcare system due to the global pandemic. Existing infrastructure had experienced problems with the rapid processing of incoming patient data and monitoring the situation. Therefore, electronic medical records have been introduced in 60 medical institutions in the country, and their implementation is underway in the regions.[20] With the introduction of the state of emergency, most government agencies switched to remote operation via the Infodocs electronic document management system and more than 80 government services are being offered online through the Tunduk system. Governments of CAS "have also moved to accelerate the digitalization of public services and tax administration, which was already under way, helping businesses connect to e-commerce platforms and creating new services, such as cash transfers and issuance of electronic permits for urban circulation during the confinement."[21]

In **Uzbekistan** the first case of coronavirus infection was detected on 15th March 2020, spurring the leadership to take immediate measures against the COVID-19 outbreak to curb the spread of the virus in the country.

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[19] Gussarova, Anna (2020). "Kazakhstan Experiments with Surveillance Technology to Battle Coronavirus Pandemic". *The Jamestown Foundation.* Published on 08.04.2020 at: https://jamestown.org/program/kazakhstan-experiments-with-surveillance-technology-to-battle-coronavirus-pandemic/

[20] Kurenev, Gleb (2020). "Цифровизация Кыргызстана. Технологии, которые способны улучшить жизнь".[Digitalization of Kyrgyzstan. Technologies that can improve life]. *Kabar News Agency.* Published on 26.08.2020 at: http://kabar.kg/news/tcifrovizatciia-kyrgyzstana-tekhnologii-kotorye-sposobny-uluchshit-zhizn/

[21] OECD (2020). "COVID-19 crisis response in Central Asia". Published on 16.11.2020 at: https://read.oecd-ilibrary.org/view/?ref=129_129634-ujyjsqu30i&title=COVID-19-crisis-response-in-central-asia

The Republican Anti-Crisis Commission was created and the strict quarantine regime had been introduced in the country. In order to contain the spread of the coronavirus among the population public health measures were immediately implemented. During the COVID-19 pandemic, especially, at quarantine period the role of digital technologies has significantly increased in the country and Uzbekistan has strengthened its ICT capacity and on the other hand the public and private sectors have also increasingly turned to digital tools in order to maintain business continuity which consequently have accelerated the pace of digitalization in Uzbekistan.[22]

Moreover, with the improvement of legal and organizational basis of banking system, especially, online payments, transfers and internet services in general, e-commerce and delivery services remarkably enhanced in the country which in turn demonstrated real progress toward digital economy and digital transformation.

As a result, “in the field of digital economy and e-commerce in Uzbekistan for 2016-2020, the gross value added increased 1.8 times and reached 8.8 trillion UZS (about 9 billion US dollars) in 2020. The volume of services rendered in the IT sector amounted to 12.9 trillion UZS in 2020, which is almost double what it was in 2016”.[23]

The total length of fibre-optic communication lines in the country has been remarkably growing since 2016. For instance, during 2017-2022 it has increased almost 6 times and reached 118 thousand kilometres as of January 2022. Since 2017, the overall bandwidth speed of the international networks has increased more than 28-fold – from 64.2 to 1800 Gbit/s in January

[22] WHO & UNDP (2020). “Uzbekistan COVID-19 situation report”. Published on 14.09.2020 at: https://reliefweb.int/sites/reliefweb.int/files/resources/COVID19%20SitRep%20Uzbekistan%2014-09-2020_FINAL.pdf

[23] Abidkhadjaev, Umid (2021). “The Digital and Green Agendas of New Uzbekistan”. Published on 07.12.2021 at: https://valdaiclub.com/a/highlights/digital-and-green-agendas-of-new-uzbekistan/

2022.[24]

As of January 2022, in Uzbekistan following the public administration reforms and digitalization of the sphere 56% public services are provided through the portal of interactive public services (e-government portal). The number of public services on the e-government platform of the country (my.gov.uz) reached 307 and 1.3 million citizens are actively using such electronic public services.[25] Whereas, the total number of Internet users in Uzbekistan reached 27.2 million.

Further reforms in public administration and wide digitalization plans are also reflected Uzbekistan's the New Development Strategy for 2022-2026. The document has been adopted on January 28, 2022 and covers seven priority areas of reforms and includes hundred target goals that are to be achieved by 2026.

Improvement of the e-government of Uzbekistan and bringing the share of electronic public services to 100% have been targeted in the new Development Strategy of the country (Goal 9). In addition, implementation of "Mobile ID-identification" system of a person in the provision of public services, introduction of "digital passport of a citizen" and "digital authority" project have been prioritized to digitalize public administration and optimize administrative procedures at central and local levels.

By maintaining stable growth rates of economic development, it is planned to reach 4,000 US dollars GDP per capita and join the group of countries with "upper-middle income" by 2030 (Goal 21). In this regard, the development of the digital economy is also defined as the main "driver" with an increase in its share by at least 2.5 times by the end of 2026 (Goal 25).

[24] The Ministry for Development of Information Technologies and Communications of the Republic of Uzbekistan. "The overall speed of access to international networks (Mbps)." Published on 10.01.2022 at: https://mitc.uz/en/stat/2

[25] Single portal of interactive government services. "My.gov.uz in numbers." Published on 03.02.2022 at: https://my.gov.uz/ru/news/728

Moreover, it is planned to expand the volume of the software products industry 5 times, and software export - 10 times– up to 500 million US dollars, the level of digitalization of production and operation processes in the real sector of the economy, in the financial and banking sectors to 70%.[26]

In the meantime, the Central Asia region remains one of the least digitally connected regions, but most governments in the region have made a commitment to a digital future. With the onset of the COVID-19, implementation of these plans will need to be accelerated. According to UNDP report, in CAS significant downside risks to digitization remain, central of them is rural-urban digital divide which might affect a number of areas: the ability of children to access online education; the ability of households to access online banking and receive cash transfers electronically; the ability of the unemployed to access online employment support; and the possibility to exploit new online income-generating possibilities.

Conclusions

The digital technologies as the driving locomotives during the global health crisis also accelerate digitalization progress in other areas such as public administration, education, medicine, employment and etc. Moreover, digitalization makes possible to maintain consistency in the functioning of the business activity of both public and private firms and companies, and also explores opportunities which must be used for the benefits and prosperity of nations across the globe.

In general, countries of Central Asia have been implementing ambitious national strategies and programs which aim at transforming into true information society by creating digital economy and digital government as

[26] Decree of the President of the Republic of Uzbekistan No. UP-60 “On approval of the Development Strategy of the New Uzbekistan for 2022-2026”. Published on 28.01.2022 at: https://lex.uz/docs/5841077

well as achieving sustainable economic development and growth.

Based on the United Nations E-Government Survey 2020 and data from the “DataReportal” open-source informational platform it is possible to conclude that although approaches of CAS to the national ICT development and digitalization differ, however they face common challenges and obstacles which could be listed as follows:

- Digital divide at national and regional levels;
- The legislative framework, especially, regarding privacy and personal data protection;
- Resource-related obstacles such as financial, technical and infrastructure;
- Internet insufficiency, its cost and speed;
- Absence of qualified professionals with IT skills;
- Low level of public trust in online platforms;
- Digital literacy.

Consequently, narrowing the digital divide at national and regional levels should be priority for policy-makers and other stakeholders in CAS. Moreover, bilateral and multilateral cooperation between CAS and with international partners are needed to decrease the digital divide among Central Asian countries.

Introducing the right policy framework to enhance digitalization could strengthen not only legislative basis but also international cooperation for better information exchange and experience sharing. In turn, less developed ICT infrastructure and the legislative framework of the digitalization hinder access to national legislature. In addition, privacy and data protection in the national legislative frameworks of CAS should be reflected and guaranteed. In this regard, the best foreign experience would be the EU policy of Protection of Personal Data and Privacy.

Concerning resource-related obstacles CAS with limited financial resources should attract international partners and donors by diversifying their geography. Investing in digital eco-system, ICT infrastructure and qualified IT services will facilitate CAS modernize national economies and accelerate inclusive growth in all spheres.

Enhancing affordability of and access to ICT, improving quality and cost of the Internet will not only contribute to narrow the digital divide within countries and enhance digital learning platforms, but also increase digital literacy and competences among population.

Certainly, in the context of the global pandemic and in general digital technology and services play a central role in recovering from the pandemic and also building resilient economies. Therefore, expanded digitalization and digital transformation should be the main priorities of CAS. CAS could also further support private sector's own digital transition by helping companies move toward e-commerce and by providing all possible assistance. Importantly the post-pandemic recovery plans in CAS should include support for digitalization and digital connectivity for the benefit of their population, national economy and inclusive sustainable development of the entire region.

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16. OECD (2020). “COVID-19 crisis response in Central Asia.” Published on 16.11.2020 at: https://read.oecd-ilibrary.org/view/?ref=129_129634-ujyjsqu30i&title=COVID-19-crisis-response-in-central-asia

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https://thediplomat.com/2020/05/technology-and-policing-a-pandemic-in-central-asia/

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Importance of Investment Projects in Developing Countries

Akbarjon Khamraliev*

Abstract: In the context of the modernization of the economy, investment activity plays an important role. The level of development of any country, that is, the development of the economy and economic growth, largely depends on the investment process in the country. The sustainable economic development of any society is unimaginable without investment. The growth of different economic sectors has led to high demand for transport infrastructure. In recent years, railway systems have played an important role in transportation systems due to the increasing demand for freight and passenger transportation. This article provides information on the role of the Angren-Pap-Namangan railway electrification project in the transport system and economy of the Republic of Uzbekistan within the framework of investment projects funded by international financial institutions.

1. Introduction

Investment activity has a direct impact on the solution of many socio-economic problems, as well as on the economic development of the country. The economic meaning of the investment activity of the state, region, and enterprise is investing in the creation of new business facilities, renovation, and modernization, as well as in the technical re-equipment of existing enterprises[1]. The role of investment projects in radically changing and

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[1] Шабыкова Н.Э., Николаевна А., Вестник Бурятского государственного университета экономика и менеджмент. Вып. 4 116 удк 336.228 Инвестиции и их роль в экономике региона. Россия, 2017.

improving the transport system of the Republic of Uzbekistan, as well as increasing the performance of the state economy is invaluable. One such investment project is the Angren-Pap-Namangan railway electrification project. Transportation systems, including railways, are considered an essential feature of all modern economies[2]. Transportation plays an important role in increasing production, reducing travel time, increasing employment, and improving accessibility. In addition, it will play an important role in reducing regional disparities and increasing the competitiveness of regions, developing trade, labour movement, and scaling-up the economy. The relationship between transport infrastructure and economic development has been at the centre of growth analyses, discussions, and interest over the past decade.[3] Transport system activity depends on the development of other sectors of the economy, which is related to the social and economic development of the country. Therefore, in forecasting the economic development of a country, it is important to carefully study and evaluate the direct and indirect impacts of the transport system and its individual sectors on the social and economic sectors of the country or region.[4] One such important system is the railway transportation system.

Nowadays, changes and structural reforms are being carried out in all spheres of the Uzbek economy. The implementation of such reforms directly depends on the investment process in the country, the state's investment policy, its priorities, and the investment activity of enterprises in the country. During the short period of our independence, a number of practical measures

[Shabykova N.E., Nikolaevna A., (2017) Bulletin of the Buryat State University Economics and Management. Issue. 4 116 UDC 336.228 Investments and Their Role in the Regional Economy. Russia, 2017]

[2] Yeser, M., (1990). Transport and Development in the Yemen Arab Republic, Ph.D. thesis, University of Wales

[3] Weiss, M. and Figura, P., (2003). A Provisional Typology of Highway Economic Development Projects, US DOT, Highway Administration: Washington DC, pp. 115-119.

[4] Vytautas Lingaitisa, Gintaras Sinkevičius (2014). Passenger transport by railway: evaluation of economic and social phenomenon. Contemporary Issues in Business, Management and Education 2013 Procedia - Social and Behavioral Sciences 110 549 – 559.

have been taken to increase and strengthen investment activity, a number of laws and regulations governing investment activities have been issued and are being applied. The investment policy is very important in this area. Because investments stimulate structural changes in the economy, technical and technological innovations, the reconstruction of enterprises, increase the country's export and import potential. In this regard, the Uzbek government is pursuing its own investment policy.

The investment policy is a set of mechanisms and methods aimed at developing and supporting priority sectors of the economy, the transition from a centralized investment process to a decentralized investment process, support for priority investment projects. In the implementation of public investment policy, priority is given to the establishment of small businesses, enterprises with foreign investment, as well as the elimination of existing shortcomings, rapid resolution of problems, and creation of a favourable economic and investment environment.

2. The Key Economic Role of Railway transportation system

The transport infrastructure is the driving force behind economic development and social wellbeing through excellent production and private sector investment efficiency[5]. In particular, transport infrastructure development could cut travel costs, encourage international investors and broaden trade.[6] Transport infrastructure performs a crucial role in industrial development as far as social capital is concerned and has evident spill-over effects on regional advancement, factor assignment, and manufacturing efficiency, which fosters the accumulation of industry, population, and the

[5] Achour, H., & Belloumi, M. (2016). Investigating the causal relationship between transport infrastructure, transport energy consumption and economic growth in Tunisia. Renewable and Sustainable Energy Reviews, 56, 988–998. https://doi.org/10.1016/j.rser.2015.12.023.

[6] Välilä, Timo (2020). An overview of economic theory and evidence of public-private partnerships in the procurement of (transport) infrastructure. 62(November 2019). https://doi.org/10.1016/j.jup.2019.100995

economy.[7] In forecasting the economic development of a country, it is important to carefully study and evaluate the direct and indirect impact of the transport system and its individual sectors on the social and economic sectors of the country or region. Railway transport is a complex production, the economic and social system with an internal, territorial-production, and functional structure. It is a key link in the chain of world economic relations. Its dynamic development and effective functioning are the necessary conditions for achieving high and sustainable economic growth rates, ensuring the economic integrity and security of any country, and raising people's living standards.

In railway transport, especially on local, suburban routes, passenger transport is considered not only a business but also a social task. It is part of a state program that provides public transportation needed to meet the needs of labour, daily, leisure, and tourism connections. Therefore, railway transport is generally supported by the state and its role is important for the economic and social sector of the state. Properly organized passenger transport infrastructure encourages the mobility of citizens, allows businesses to rationally distribute production units, allows for regional economic growth, specialization, and so on. This affects the productivity of employees, their living standards, in other words, the passenger. The transportation system affects not only the economy but also communities and their members.

2.2. Impact of Logistics Operations on Economic Growth

The formation of freight and passenger traffic, optimization of railway operating costs, ensuring the safety of train traffic is carried out in close cooperation with foreign partners in the framework of international

[7] Claudio Ferrari, Anna Bottasso, Maurizio Conti, Alessio Tei. Chapter 7 - The Economic Effects of Transport Infrastructures: A Critical Review of the Empirical Evidence, Editor(s): Claudio Ferrari, Anna Bottasso, Maurizio Conti, Alessio Tei, Economic Role of Transport Infrastructure, Elsevier, 2019, Pages 181-240, ISBN 9780128130964, https://doi.org/10.1016/B978-0-12-813096-4.00007-X

agreements. After the construction of a railway line through the valley in Uzbekistan, logistics services began to develop in the region. The volume of trade, exports, and imports with neighbouring countries has increased. This, in turn, will increase the economic and social situation in the region. Railway logistics is created by the rapid development of the modern logistics industry in the country and abroad, the constant adjustment of the efficiency of railways, and the continuous transfer of transport capacity. The integration of modern logistics and supply chain management and service concepts based on resources such as rail freight provides the customer with comprehensive and integrated modern logistics services based on railway transport can be used as a railway service provider for logistics services. It can also be used as a state logistics base to attract relevant logistics companies to join the logistics service. Railway logistics typically have moderate development, full functionality, strong capabilities, advanced equipment, and widespread radiation characteristics.

3. Railway transportation system Infrastructure Improvement

The Central Asia Regional Economic Corridor (CAREC) 2 (Pap-Namangan-Andijan) Railway Electrification Project aims to electrify the missing 145.1 kilometres (km) of non-electrified track linking major cities in the populous Fergana Valley with Tashkent.

This will facilitate the direct and efficient operation of both freight and passenger train services and thereby promotes the economic and social development of the Fergana Valley. The Project will be aligned with the following impacts:

- stimulated economic growth in the Fergana Valley, and
- increased regional trade along CAREC Corridor 2.

The outcome will be the level of passenger and freight service on the Pap-Namangan-Andijan railway line improved. Today, more than 10 million

people live in the Ferghana Valley. Out of these, more than 2.5 million are in the Namangan region. The strangeness of the new Angren-Pap-Namangan railway line is that it crosses the edge of the Kurama Range through a tunnel under the Kamchik Pass at an altitude of 2,200 meters above sea level. The length of the tunnel is 19.2 km. Along with this, it will serve as the most important link in the new international transit railway corridor China - Central Asia - Europe. With the commissioning of the electrified railway line in 2016, the valley was fully connected with the capital and other regions of the country, and a major problem was solved.

The project has developed two products. First, the railway infrastructure along the Pap-Namangan-Andijan railway has been upgraded. The project enabled the electrification of a 145.1-kilometer single-track mainline line to 27.5 kilovolts of alternating current. Also, two traction substations and dispatching points were built, maintenance equipment and machinery were purchased, signalling and communication facilities were modernized, and external power supply facilities were built to transmit electricity from the main network to traction substations. Second, railway safety has improved. As a result of the project, the frequency and speed of trains have been increased.

The positive impact of the project was through supporting the overall macroeconomic development of the Fergana Valley. In addition, the population was able to travel to the Fergana Valley in a timely and safe manner. Electrification of the Pop-Andijan-Namangan railway section in most parts of the Fergana Valley will not only increase trade and passenger traffic but it also:

- created new jobs;
- reduced operating costs;
- reduced the need for material resources by abandoning diesel fuel;
- improved the quality of consumer services by increasing the speed of

movement;

- reduced delivery of goods at the transit passenger accommodation;
- reduced the negative impact of railway transport on the environment and people;
- increased capacity of the railway sector.

Since the existence of the railway transport line financed by the investment project, it has also been working closely with other sectors of the country's economy. One of its main tasks is to ensure the timely transportation of goods and passengers to meet the needs of the economy. The work in this direction is carried out in various forms and is aimed at ensuring the maximum security of the railway network of the Republic of Uzbekistan.

4. Conclusion

The effective functioning of the Uzbekistan railway system plays very special role in creating the conditions for modernization, the transition to an innovative path of development, and sustainable growth of the nation and contributes to the creation of conditions for ensuring the country's leadership in the regional economic system. The railways of Uzbekistan, as the most important link in the trans-regional transport corridor, occupy a worthy place in the system of international rail transportation. After all, the main railway lines of our country have a great transport, communication, and transit potential, uniting East and West, South and North. The Angren-Pap electrified railway line will play an important role in further economic development of our country, improving the well-being of our people. Construction and industry, transport and communications – important elements of economic development – create the basis for the development of services, healthcare, education, the opening of new centres of culture, expand export opportunities and Uzbekistan's access to foreign markets, and

at the same time, the transit potential of our country is growing.

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Monitoring and evaluation of implementation and analysis of modern agriculture technologies in the framework of the project in water sector of the Republic of Karakalpakstan

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Abstract: This thesis describes methods for measuring and assessing the efficiency of irrigation supply systems and their impact on the environment, water resources and vegetation indices. Also, such indicators as soil salinity were considered and on the basis of the data obtained geoinformation maps with areas and levels of soil salinity were created

1. Introduction

The Republic of Karakalpakstan, which is located in the western part of Uzbekistan next to the Aral Sea over the area of 160,000 km2, with population of about 1.79 million people[1].

Agriculture holds one of the leading positions in the economy of this region and is a vital sector of the national economy of the Republic of Karakalpakstan that meets the demand of the population in food products, and demand of the industry in raw materials. The general public engaged in agricultural production is about 33% of the total population. Production of agricultural products (cotton, wheat, livestock and melons and gourds) is highly dependent on the timely and qualitative provision of I&D services.

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[1] As of January 1, 2017, State Statistics Committee of the Republic of Uzbekistan, http://www.stat.uz/demograficheskie-dannye

The single source of water for irrigation in the territory of South Karakalpakstan is the Amu Darya River. The supply of water to the territory of the region and its quality depends on the water availability of Amu Darya River. More than 40% of water supply for irrigation of this territory is made by pumping irrigation, that significantly increases the costs of water management organizations for operation and maintenance of the irrigation system, reduces water availability, that, as a consequence, reduces the incomes of final recipients of benefits from agricultural production.

To solve the designated problem, the Government of the Republic of Uzbekistan commenced the implementation of the South Karakalpakstan Water Resources Management Improvement Project (SKWRMIP). It was decided that elimination of dependence on the use of pumping stations will be achieved by development of system of gravity-flowing water extraction from the Tuyamuyun dam and dismantling most of these pumping stations.

In order to ensure an integrated approach to the achievement of the final results, the project includes three basic components: (i) works related to the modernization of the irrigation network, (ii) improvement of agriculture and (iii) project management.

2. Project Area and Description

The whole project area is located in South Karakalpakstan and covers the Beruniy, Turtkul and Ellikqala districts. The territory of the project zone is approximately in 130 km to the south-east from Nukus city, the capital of the Republic of Karakalpakstan, and about 20 km to the north from Urgench city, capital of Khorezm region

The northern boundary of the project area goes along the desert edge, eastward from Amu Darya River. The eastern boundary goes along VST-2 drain and Yanbash canal, while Amu Darya forms boundaries on the South

and on the West.

The total population in the project area is 530,800 people, of which the economically active population is about 177,200 people, which is more than 28% of the economically active population of Karakalpakstan.

This project will cover a territory with a total area of 150,650 hectares, of which 100,000 hectares are irrigated lands. The main crops are cotton and wheat, which are sown in most of the project area, forage crops, vegetables, potatoes and corn are also grown.

More than 40% of water supply for irrigation in project area is performed by three large pumping stations (Nayman-Beshtam, Qilchinoq and Dustlik), which pump water from Amu Darya River, and more than 54 pumping stations of lower capacity.

Within the SKWRMIP scope, such dependence on pumping stations will be eliminated by development of gravity water intake system from Tuyamuyun dam and disassembly of all pumping stations, that will reduce the cost of operation and maintenance (O&M), and will improve the institutional aspects of water resources management.

As a result of the project implementation, the irrigation water availability will become more reliable, and the farm enterprises will be able to grow more valuable crops that were mentioned above, that in turn will increase cost recovery for O&M. Farm enterprises that grow cotton will be able to increase yields, as well as to gain benefit from the mechanization of the cotton harvesting process.

In this regard, the basic objective of the project was to restore and build new irrigation networks, and improve water management practices in the project area in a sustainable and financially efficient manner.

To achieve the set goals, the following main objectives of SKWRMIP

were identified:

- promote sustainable development of irrigation agricultural production, increase employment rate of population and develop income of farm enterprises in South Karakalpakstan by improvement of irrigation systems and general water resources management;
- introduce collective irrigation management through Water Consumer's Association and improve agricultural and irrigation practices; as well as
- strengthen the water resources management and increase potential of water management organizations

The set goals and objectives of the project will be achieved through the implementation of three components of the project, for which indicators have been identified to assess the effectiveness of their implementation:

Component 1: Modernization of the irrigation network

Component 2: Modernization of agriculture

Component 3: Project management, monitoring and evaluation

The duration of the project implementation is from 2015 to 2022.

3. Water system Analysis and Data Collection

Groundwater level data from 17 observation wells along the Buston canal for 2016-2019 were obtained from the Reclamation Departments of Turtkul, Ellikqala, and Beruniy districts. These data were converted into the appropriate form and connected to the map of observation wells created in the previous stage of work[2].

Also, data on soil salinity in the cross-section of 3 water users association (WUA) were obtained, based on averaging the point data on salt

[2] M. Akmuradov, M. Ansti, D. Bakhir, et al; ed. by M. Akmuradov. Environment and protection in the Amu Darya basin. France. 2011

survey of soils of irrigated lands in the Republic of Karakalpakstan. Such surveys are carried out with the periodicity of 4-5 years[3].

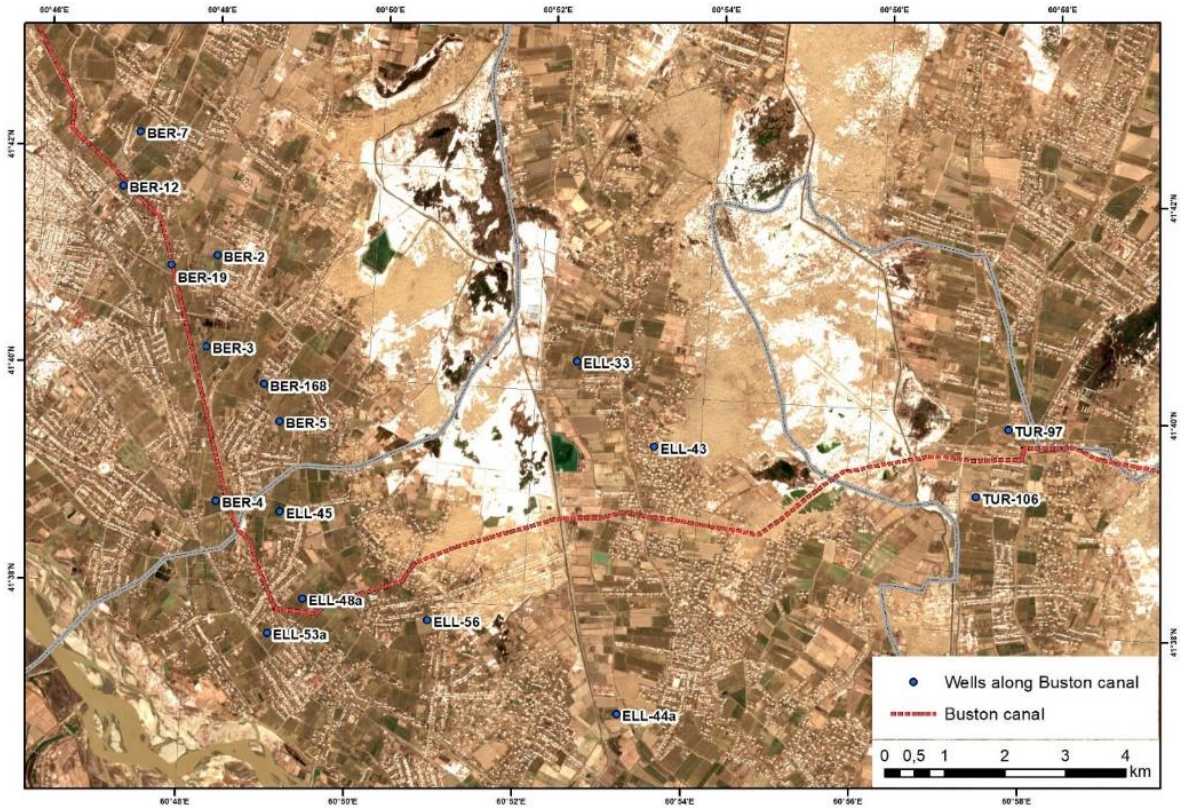


Figure 1. Map of the location of 17 observation wells along the Buston Canal.

Irrigated land is the basis of Uzbekistan's agriculture. Of all Central Asian countries, Uzbekistan has the largest area of irrigated land. The vast territories occupied by agricultural lands are difficult to control due to the lack of accurate maps, undeveloped network of operative monitoring points, ground stations, including agrometeorological ones, lack of aviation support, due to the high cost of maintaining staff, etc. In addition, due to various types of natural processes, there is a constant change in the boundaries of acreage, soil characteristics and vegetation conditions in different fields and from site to site.

All these factors hinder the obtaining of objective, operational

[3] Annual Reports, 2016-2021. Tashkent, SKWRIMP WB

information, which is necessary for ascertaining the current situation, its assessment and forecasting. And without this, it is practically impossible to increase the production of agricultural products, optimize land use, forecast yields, reduce costs and increase profitability.

Space survey materials can help both to solve complex tasks of managing agricultural territories, and in highly specialized areas. Typical tasks in this area are: inventory of agricultural land, monitoring of crop conditions, allocation of erosion, salinity and desertification areas, monitoring the quality and timeliness of various agricultural activities. With a systematic repeatability of surveys - monitoring the dynamics of crop development and forecasting yields. For example, knowing how the spectral brightness of vegetation varies during the growing season, one can judge by the tone of the image of the fields their agrotechnical state. After wintering, the condition of winter crops is estimated by the difference in the colour of healthy and dead plants, the condition of winter and spring crops before harvesting - based on taking into account the degree of coverage of the soil by sprouts and the uniformity of their distribution.

For agricultural monitoring purposes, a wide range of indices obtained using remote sensing data, including those from Sentinel satellites, is widely used. Image indexes are images computed from multi-channel images. Images help to identify a particular existing phenomenon, while mitigating other factors that worsen these effects in the image. For example, the vegetation index will show healthy vegetation with a bright colour in the index image, while the poor vegetation has lower values, and the desert territories look dark. Because the shadows from the forms of the terrain (hills and valleys) affect the intensity of the images, the indices are created in such a way that the colour of the object is more prominent, and not the intensity or brightness of the object. The value of the vegetation index for healthy pine

trees shaded in the valley will almost coincide with the index for pine trees in direct sunlight. These indexes are often created by combining, adding and deleting canals, so they represent different proportions of canals.

Sentinel-2 satellite images provide an opportunity to analyse a large number of index products, mainly for agricultural monitoring purposes. The quality of vegetation and the degree of water stress can be characterized by various parameters such as the leaf area (LI), photosynthetic pigments and biosynthesis - carotenoids (indices SIPI, PSPI, CRI1, CRI2), chlorophyll (indices NDVI, MTCI, CARI, MCARI, EVI) and anthocyanin (ARI1 index, ARI2), moisture content (indices NDII, MSI, NDWI), etc. The SR (vegetation, soil, deserts, snow, water, cloudiness), NDBI (building) indices are used to determine the type of the underlying surface. In order to assess the effect of atmospheric aerosols on the quality of satellite images, there is applied ARVI index[4]

One of the main ways to use these indexes is to compare the same object on a set of images over a period of time. For example, there are many images of the agricultural field, which are performed periodically from the time of seeding the field and throughout the growing season. The vegetation index is calculated for each image. When you analyse these vegetation indices, you expect to see an increase in brightness during the growing season. Then, when the vegetation starts aging, you expect the index to decrease until the output yield is harvested, or the leaves fall down at the end of the season. The averaging effect of the indices makes this comparison reasonable. By comparing the different in the field, you can determine the flourishing fields. Also, this type of analysis can also be used to determine the fields that experience water stress.

[4] http://sentinel-hub.com/apps/wms/wms-parameters/EOproducts

The possibility of using a particular vegetation index is determined by the specific properties of the studied territory and depends on local factors. In any case, ground surveys are necessary before using the indices. For this, in the first stage, the selection of test sites and the collection of space-time series of data on these areas are carried out. These series should cover the time period for which remote sensing data are available.

During the project survey the author has conducted and is conducting regular collection of available remote sensing data, atmospheric correction and image coupling for full coverage of the project area. In addition, there are calculated some indicators for agriculture, such as vegetation index, moisture index and salinity index.

Figure 2 shows the model by which the vegetation index is calculated on the basis of Sentinel2 images.

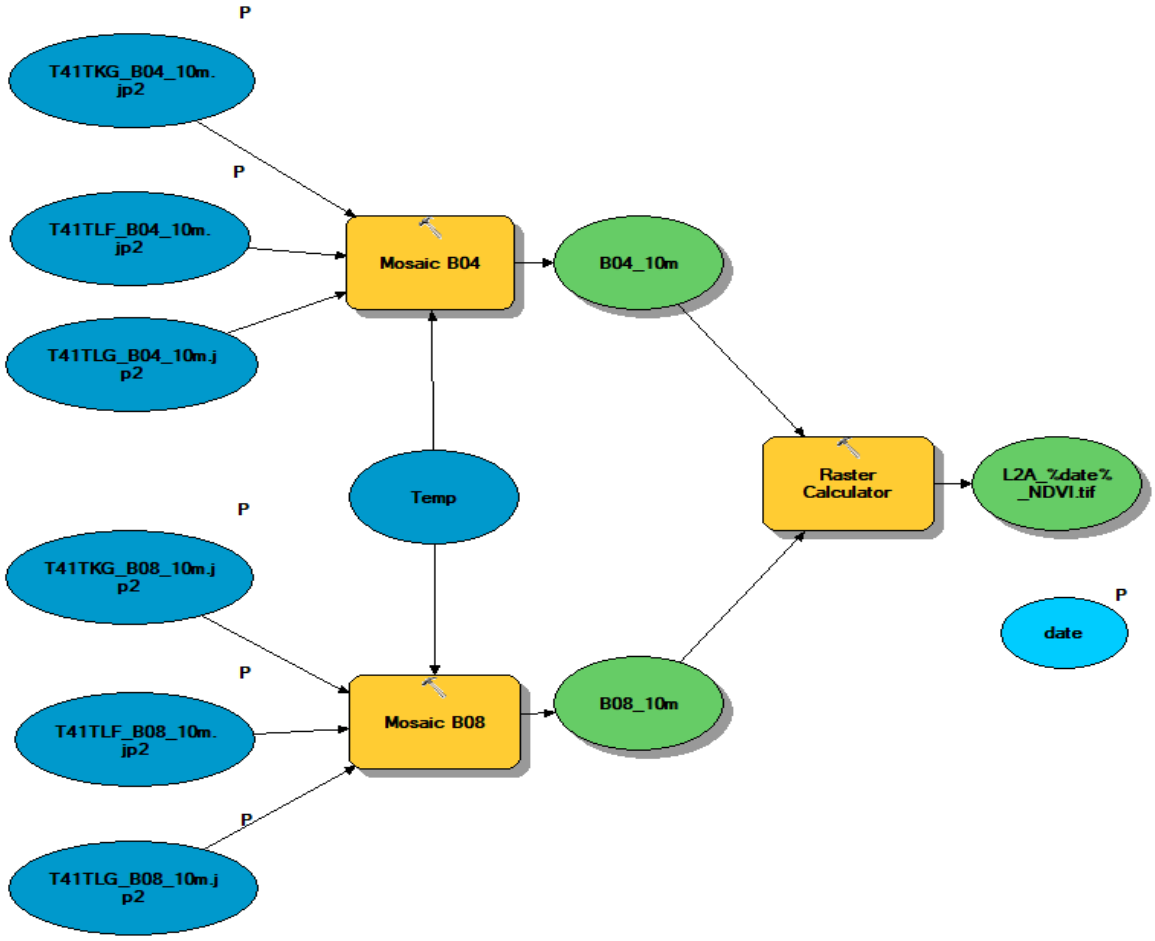


Figure 2. Model of NDVI.

The model input uses 6 images (3 images for Channel 4 and 3 images for Channel 8), then for each channel a mosaic covering the project area is created, after that NDVI is calculated using a standard formula based on 2 spectral channels (Raster Calculator). Such a procedure is performed for each date you want to obtain vegetation index data for, basically these dates cover the vegetation period.

As a rule, maximum values of vegetation index fall at the end of August-beginning of September (Figure 3).

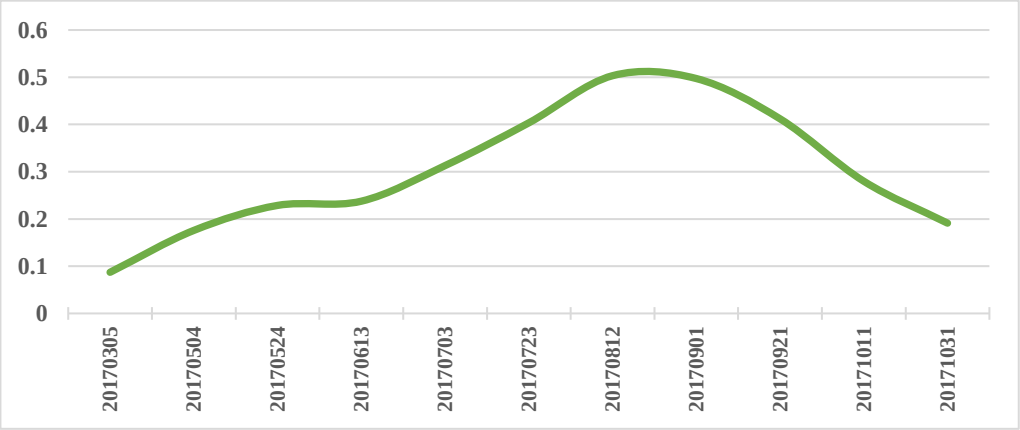
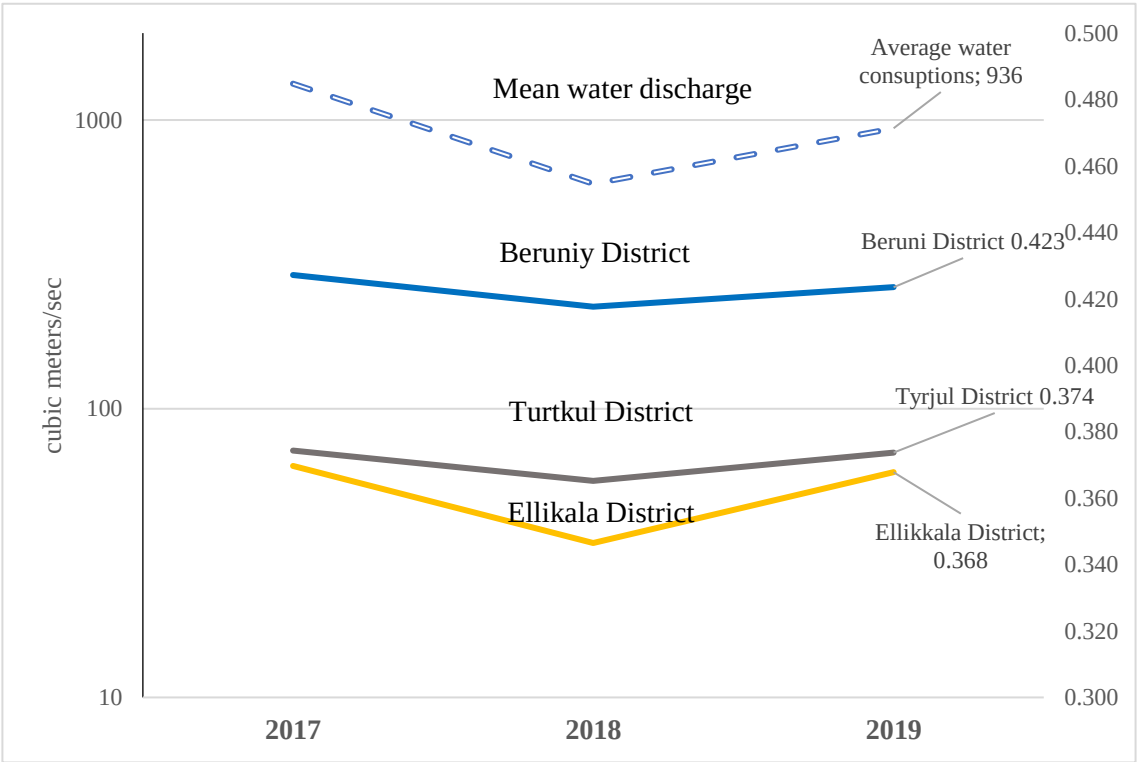


Figure 3. Intra-annual variation of the vegetation index

The interannual graph of vegetation index change in Figure 4 shows its decrease in low water availability in 2018, especially in Ellikqala district. During the growing season of 2018 the water discharge at the Tuyamuyun reservoir post was 50.1% of the norm.



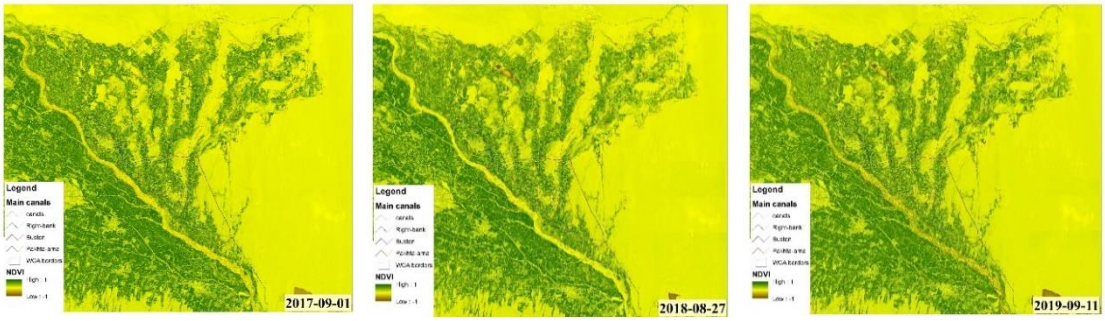


Figure 4. Averaged NDVI values in 2017, 2018, and 2019 in late August and early September compared to the average water discharge during the growing season at the Tuyamuyun Gap post.

4. Results and Conclusion

Data on water discharge from Tuyamuyun reservoir can be considered as an indicator of water availability in the territory of southern Karakalpakstan. Especially close relation is observed for Ellikqala rayon district that may be the reason of lower level of adaptation measures in case of low water availability.

In turn, data on vegetation index can be considered as indicator of effectiveness of agrotechnical measures, which especially affects agricultural productivity in periods of low water availability.

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Social Innovations in local communities, and local governance in post-Soviet Uzbekistan

Bakhrom Radjabov*

Abstract: The article discusses and evaluates 'social innovation' projects (SIPs) in/for local governments and communities, that have been undertaken by the government, civil society organizations (CSOs), international donors such as UNDP/UNV 'Social Innovation and Volunteerism in Uzbekistan' Project with development assistance of UNDP and Partnership for Innovation (P4I) Project supported by USAID. It contributes to knowledge on the concept of social innovation through the yet missing critical analysis of social innovations in local governments and communities of post-Soviet Uzbekistan. Theoretical and empirical analysis is achieved by applying social practice and human development theories to theoretically formulate, and empirically apply the concept of social innovation.

Key words: Social Innovations, Uzbekistan, Local Governance, Local Communities, social practice

Introduction

SIPs in local governments and communities in Uzbekistan have been first launched within the UNDP-supported UNDP/UNV 'Social innovations and Volunteerism in Uzbekistan' Project. The small-scale projects implemented within the UNDP/UNV Project were aimed at solution of social problems in local communities through designing and prototyping innovative

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solutions generated by the local inhabitants. The UNDP/UNV Project has been driven by UNDP from 2012 to 2014 and covered the areas as described in the Table 1. Most of the small-scale projects have been introduced locally without further diffusion across the social system in Uzbekistan. Later, in 2018 innovations received special attention from the new government of the president Shavkat Mirziyoev. For instance, the Ministry of Innovative Development has been established, Nationwide movement 'Yuksalish' co-implemented local projects with support of USAID within P4I Project (see Table 2). In general, the goal to introduce innovations in the domestic economy and the public sector (see Table 3) has been formulated by the Uzbek government. In this research, scrutinizing projects supported by the government, CSOs and international donors in Uzbekistan provides empirical findings of theoretical approach to social innovation.

Table 1. SIPs in Uzbekistan supported by UNDP/UNV 'Social Innovation and Volunteerism in Uzbekistan' Project, 2012-2014

Category	Brief description of the projects
ICT (for people from vulnerable groups)	'IT masters' – teaching IT skills to unemployed individuals for better job opportunities; 'Muynak website' – a website for a small town experiencing an environmental disaster and economic challenges, to boost local and international tourism; 'E-dairy' – an electronic diary for parents to follow the in-class grades and accomplishments of their children at school; 'Infobox' – a mobile app containing information about the Bukhara city, available for tourists and locals.
Engineering/ infrastructure	'Mobile electrical power station' – an engineering construction allowing the generation of energy from wind; 'Enjoying old age' resource centre – a physical space for elderly people to learn new skills and communicate with each other; 'Shower and water supply' in fields in rural areas, plus foil for warming up water – a water supply system allowing

	for the efficient collection, saving and distribution of water for hygienic purposes in rural areas (farms).
Education/ trainings and workshops	‘Summer Camp and DIY Labs in Muynak’ – trainings and workshops have focused on the ‘Do-It-Yourself’ methodology for solving local issues; ‘Debates tournament in Andijan’ – a training on debating techniques and methodologies for youth to strengthen their role in the local context; ‘Training on reproductive health among the Roma population’ – a training based on the peer-to-peer methodology to promote reproductive health among so-far neglected parts of the population; Module ‘All the money under control’ – a methodology of keeping funding accountable and manageable; ‘Awareness-raising campaigns for Breast Cancer prevention among women in Jizzakh’ – new approaches for promoting breast cancer awareness; ‘Inspired Teachers’ – a new methodology of preparing English teachers from local schools; ‘English guides’ – new guides on effective English teaching under supervision; ‘Social Entrepreneurship skills’ – a training on teaching social entrepreneurship skills; ‘Constructor’ – a scheme increasing young people’s interest in science, through developing design and construction skills; ‘Peers club’ – a club of peers which enables skills and knowledge exchange, as well as coaching each other; ‘Café Scientifique’ – a project promoting science through a non-traditional (out of classroom) approach; ‘Volunteers engagement (in the NatLib)’ – educating volunteers for the National Library of Uzbekistan. Sharing the culture and values of volunteerism.
Specifically aimed at people with disabilities	‘Fantasy-Club’ initiatives – courses on beading and jewellery for girls with disabilities, plus a new marketing approach for goods produced by the girls; ‘Mohir Hunarmand’ – a course teaching new skills to children (including children with disabilities) from orphanages;

	‘The week of football’ – a football tournament for people with disabilities; ‘Translations of audio and video for the Deaf and Hard of Hearing’ – creating audio and video materials for people with disabilities available publicly; ‘Taxi for people with disabilities with ‘Perekrestok’ Taxi’ – a taxi redesigned specifically for drivers with disabilities.
Filming/Arts	‘Afishka’ Festival of auteur theory and social films – a festival on short movies on social issues; ‘Film on TB prevention’ – a movie which approaches the tuberculosis problem in a new (unusual for the Uzbek context) manner; ‘Voice of volunteers’ – a radio program on pressing social issues, designed by volunteers; ‘Theatre by children’ – a theatre of children for children, describing and solving pressing social problems; ‘Video project about people living with HIV’ – a new approach to raising public awareness of the problem of HIV in Uzbek society.
Others	‘Eco bags with ‘Korzinka.uz’ – social enterprises producing eco-bags and selling them out through the retailing chain of ‘Korzinka.uz’ supermarkets; ‘Promoting local tourism in social networks (with the LGSP project)’ – a new approach in promoting local tourism; ‘Iact. Volunteers platform’ – a new online platform uniting volunteers in Uzbekistan. Connecting those who need volunteers with those who wish to volunteer; ‘Do It Yourself (DIY) Lab’ – conducting the ‘Do-It-Yourself’ methodology through the lab works in different public places, to encourage solutions for problems through the local mobilization of human resources and waste.

Source: Table compiled by the author based on UNDP data.

Table 2. SIPs in Uzbekistan supported by ‘Yuksalish’ and P4I

Category	Brief description of the organizations (projects)
Small grants and methodological support for NGOs	‘Nihol’ (Tashkent) ‘Special Olympics’ (Tashkent) ‘Yuksak salohiyat’ (Tashkent) Centre for Development of Modern Journalism (Tashkent)

	‘Taraqqiyot’ (Fergana region) ‘Prometheus’ (Fergana region) ‘Ayol va shodlik’ (Surkhandarya region) ‘Hamdard’ (Khorezm region) ‘Mehr’ (Syrdarya region)
Small grants and methodological support for Public Councils	Public Council under the State Committee for Ecology and Environmental Protection Public Council under the Tashkent city administration Public Council under the Bukhara regional administration Public Council under the Kokand city administration Public Council under the Department of Justice of Namangan region
Co-working centres to support vulnerable population and civil activists	Women’s and youth centre ‘Tumaris’ (Navoi region) Legal Resource co-working centre on gender education Centre of development and support of initiatives ‘Nihol’ (Tashkent) ‘Taraqqiyot’ support and development centre (Fergana) NGO ‘Ezgu niyat’ and the project ‘Successful space’, created on the basis of additional space for civil activists and people with disabilities (Kokand).

Source: Table compiled by the author based on data provided by ‘Yuksalish’.

Table 3. Projects supported by the government

Category	Brief description of the organizations (projects)
State-led projects in public sector	Agency for the provision of public services under the Ministry of Justice and public service centres Online reception rooms of the President of Uzbekistan Prime Minister’s receptions

Source: Table compiled by the author based on collected data.

1. Theoretical foundations of the research

Theoretical debate concerning social innovations is ongoing since the concept is still undertheorized but is beginning to catch up to the practice. Numerous social science theories have contributed to the theoretical discourse on social innovation. The scope of discussion covers development theories, theories of entrepreneurship and sociological theories etc. that try to conceptualize social innovation. In this article, given the task of the current research, I apply social practice and human development theories to evaluate

projects in local governments and communities. The combination of two theories is explained below.

Social practice and human development theories and social innovation

Social practice theory emphasizes that social innovation is not just an invention but “a new combination and/or configuration of social practices prompted by certain actors or the constellation of actors in an intentional targeted manner with the goal of better satisfying, or responding to needs and problems, than is possible on the basis of established practices”.[1] For the social practice theory invention is a central element for social development[2] but imitation/repetition is the central mechanism of social reproduction and social change.[3]

The process of social innovation, according to social practice theory, goes through the stages of implementation of planned or unplanned interventions, prototyping/piloting of a new idea in an existing social context. Institutionalization follows the implementation stage to assure that a new social practice becomes an everyday routine. The diffusion stage advances imitation to the level of new social practice that potentially changes existing social structure enabling social change. These key stages of generation of social innovation clarify how a new social practice can make social change and create a new social reality.

The human development concept and capability approaches have been inspired by Amartya Sen and Martha Nussbaum and discussed by many

[1] Tarde cit. in Howaldt, Theoretical Approaches to Social Innovation - A critical Literature Review. Dortmund, Germany: A deliverable of the project: ‘Social Innovation: Driving Force of Social Change’ (SI-DRIVE), 2014, p.16.

[2] Ibid, p. 19.

[3] Ibid.

scholars[4] as a critique of development limited to economic growth only. Sen has argued for the capability approach to development in the form of freedoms and opportunities for individuals, mostly from deprived communities. Essentially, the capability approach "puts human agency at the centre of the stage"[5] providing a people-centeredness criterion of social innovation, which is applicable in the current analysis. As an evaluative framework, the capability approach can "promote the concept of social change as human development by focusing on social innovation as a new combination of capabilities".[6] Combination of social practice and human development theories generate the features of social innovations covered in the table 4.

Table 4. Common features of social innovations

Features	Explanation
Newness	New inventions (new actions or new in social contexts).
People-centeredness	Individuals experiencing certain problems come up with solutions to these problems, which is at the core of any social innovation. Social innovations strive for more inclusiveness of individuals and social groups left behind by the previous policies and programs.
Networking and collaboration	Networking and collaboration among different actors (government, CSOs, private companies, individuals) for the generation and progress of social innovations.
Localness and focus on specific domain or sector neutrality	Social innovations start locally. They are aimed at specific domain (e.g., education, health care, governance etc.). or social innovation does not emerge in one sector and is not limited to one focus.
Use of technologies (ICTs)	Technologies (ICTs) used in designing and implementation of social innovations. Low-tech social innovations are also possible.
Making social impact OR	Addressing particular social problems and social needs.

[4] See Elsen (2014), Ibrahim and Tiwari (2014), Millard (2014).

[5] J. Howldt and M. Schwarz. (2017). Social Innovation and Human Development: How the Capabilities Approach and Social Innovation Theory Mutually Support Each Other, 13.

[6] Millard and Ziegler cit. in Howldt, J., & Schwarz, M. (2017). Social Innovation and Human Development: How the Capabilities Approach and Social Innovation Theory Mutually Support Each Other, 12.

addressing needs	
Scaling up	Scaling up/diffusion of social innovations across the social system.
Social change	The process of change in the social structure of a society in its constitutive institutions, cultural patterns, associated social actions, and conscious awareness.

Source: Table compiled by author based on data from the reviewed literature, interviews, documents, and online sources related to the projects.

The criteria of social innovation derived from the theoretical literature should help to determine the progress (if any) of projects in Uzbekistan towards becoming true social innovations.[7]

Research Questions

Since the purpose of the study is to critically analyse whether projects in Uzbekistan in/for local governments and communities can become social innovations, I formulate research questions designed to critically approach the projects:

1. What have been the gains and shortcomings of these projects in terms of 'social innovation'?
2. How projects maintained by the government, CSOs and international donors have advanced towards bringing social innovations in local governments and communities?

Argument

Social innovation is a multidimensional concept that is inversely used in various contexts. UNDP and USAID in Uzbekistan have introduced projects labelled as 'social innovations' to address issues in local governments and communities. SIPs in Uzbekistan in 2012-2014 have failed to become true

[7] Covid-19 outbreak in post-Soviet Central Asia: Has the time come for social innovations? Retrieved March 13, 2022, from the CAP Paper: https://capgwu.b-cdn.net/wp-content/uploads/2020/11/CAP-Paper-246-Bakhrom-R.pdf

social innovations as the projects suffered from weak civic activism, accountability, ICT infrastructural problems, and the lack of the true commitment from policymakers.

From 2018 new government of Shavkat Mirziyoev prioritised the support of innovations in various sectors in Uzbekistan, including branches of economy, industry, and the public sector. These projects "have been designed and delivered by state institutions".[8] While they have a long way to go before achieving institutionalization, over time these projects can potentially advance towards being new social practices in social contexts and, subsequently, contribute to formation of social innovations.

2. Evaluation of SIPs supported in Uzbekistan against their social innovation characteristics

Newness: New actions in the new social context

In Uzbekistan, the UNDP-supported SIPs have been aimed at either innovative application of existing practices or offering novel solutions to the existing problems.[9] Generally, the newness of the projects was treated subjectively without comprehensive research undertaken before accepting any project idea. Donor organizations were usually aware that ideas of the SIPs had been tested outside of the region and were not therefore entirely new. However, they believed that adapting those ideas to the local social context would constitute a new approach to the existing social problems.

Another approach to newness in Uzbekistan was when a new social relationship has been established between societal actors that have not previously collaborated. One example of such relationships has been

[8] The Prospect of Social Innovations in Uzbekistan. Retrieved March 13, 2022, from the Central Asia-Caucasus Analyst: https://www.cacianalyst.org/publications/analytical-articles/item/13671-the-prospect-of-social-innovations-in-uzbekistan.html

[9] Interview, Sevara Khamidova. Via IMO Messenger. November 2017.

demonstrated by ‘Yuksalish’ and P4I supporting local public councils and their cooperation with local CSOs. In other words, newness was not limited to the creation of a new product or service, it was sufficient to either offer a contextually new idea or practice that can solve an existing problem or generate a solution in a new social relationship. Thus, SIPs in terms of their newness (e.g., contextual newness) fit in the requirement of social practice theory.

People-centeredness: Citizen-driven projects for solving problems

The people (or human) – centred approach was applied to all SIPs in Uzbekistan. It was a priority element in designing SIPs supported by international donors. This reflects their intention to design the development projects differently, by engaging directly with individuals and communities experiencing development challenges.

One of the good examples of the local SIPs designed based on the human-centred principle is Infobox. Infobox was launched for the local government of the city of Bukhara in Uzbekistan. It allowed local inhabitants to provide local government with information the on the local communities they live at.

Infobox also intended to solve this problem by crowdsourcing information about different locations in the city. In this regard the leader of the project Umid Gafurov says that “the idea of Infobox is to create an online database which will help local people to find the needed information and save their time. It is based on the Web 2.0 platform, meaning users can add information about places which they have visited, but which are not yet displayed on maps or websites”.[10]

A similar approach was applied in the cases of other SIPs. The

[10] Interview, Umid Gafurov. November 2017.

uniqueness and inclusiveness of the people-centred approach was also in its ability to involve previously neglected groups (individuals), by allowing those groups experiencing problematic issues to design solutions. In other words, the problems should not be solved for them, but rather by them, because it was believed that people in trouble knew better than anyone else about the problems they have.

In this context, Emiliya Asadova from UNDP says:

We at the UNDP are not experts in the field anymore. As you well know, and as user-centred design of social innovations tells us, people experiencing the problems are the experts in this problem. We should ask them how they want these problems to be solved.[11]

Networking and collaboration: active role of the project leaders

Networking and collaboration, as per social practice theory, has implied the constellation and collaboration of different actors for the generation and progress of SIPs. This criterion has been partly fulfilled in Uzbekistan. UNDP and the UNDP/UNV project intended to establish cooperation with different actors, to assure the generation of SIPs by different stakeholders, and to eventually achieve the further institutionalization of SIPs. Although networking was undertaken with the government, the scaling up and institutionalization of SIPs was challenging. Particularly, collaboration between the government and community leaders was not easy. Usually, the government support of SIPs was missing.

For instance, Mr. Gafurov recalls that “in case of government, the Infobox project can help them [local governments] to interact with local people via the Internet: answer their questions and solve their problems. This did not

[11] Interview, Emiliya Asadova. August 2017.

happen though. Now, I do not plan to continue the project".[12] Ms. Khamidova, also acknowledged that "several SIPs have been cancelled due to missing government support".[13]

SIPs had better chances to progress if they have the support of different governmental (public), private and/or non-governmental organizations. In this context the leader of the Peers club project conducted within the local community of the city of Gulistan, Mr. Kholosboev, recalls that the "fundamental step for the planning of new projects was the base for uniting the local youth with local authorities".[14]

Networks and collaborations which occasionally emerged while running SIPs were workable and helped to implement projects to different public and private organizations. Emiliya Asadova from UNDP recalls an example related to eco-bags project with the 'Korzinka.uz' retail chain. She said: "Korzinka.uz still has the eco-bags on its shelves produced by the social enterprise supported by UNDP. This was the project we launched together in 2014".[15]

Localness of projects: better opportunities for working at the community level

All SIPs in Uzbekistan have been launched locally. Donors have also tried to go local with SIPs, because they wanted to primarily tackle local problems. They also believed that if local solutions are successful, they can be later scaled up and become countrywide solutions.

For instance, the manager of the UNDP/UNV project Mr. Ayupov says in this regard: "all projects, everything we did was implemented on the local

[12] Interview, Umid Gafurov. November 2017.
[13] Interview, Sevara Khamidova. Via IMO Messenger. November 2017.
[14] Interview, Doston Kholosboev. November 2017.
[15] Interview, Emiliya Asadova. August 2017.

level".[16] These projects have been regarded by the government as being something less sensitive and aimed towards providing technical assistance to local governments.

After the project's approval by relevant government authorities, 'social innovation' project was usually piloted by local governments and/or communities jointly with leaders of the SIPs. This was the only option to get government institutions in Uzbekistan involved in the local SIPs, or to receive their permission to implement a project. In this regard, Emiliya Asadova confirms that "doing 'social innovation' projects, was probably, the only option for us at UNDP to work on a local level with local communities".[17]

Despite difficulties faced, the implementation has played positive roles. SIPs assured the greater participation of individuals in solving their local daily problems, by involving them in activities of SIPs through creating new social relationships.

For instance, Infobox that was planned for the local government in Bukhara was designed in accordance with that particular idea. As Umid Gafurov says: "one of the main ideas of Infobox was to link government and local people, so they can interact with each other using the website, or the latter app".[18] Ulugbek Musabekov, who led the E-dairy project in a local community in Tashkent, emphasized that his project was primarily aimed to the local community. He tells about his project: "the project was aimed to satisfy the needs of the local community we were working with".[19] Kholosboev, the leader of the Peers club project in the local community in Gulistan says that his project's purpose was to empower people locally: "without any doubt our project empowered local people".[20] In other words,

[16] Interview, Bokhodir Ayupov. August 2017.
[17] Interview, Emiliya Asadova. August 2017.
[18] Interview, Umid Gafurov. November 2017.
[19] Interview, Ulugbek Musabekov. November 2017.
[20] Interview, Doston Kholosboev. November 2017.

SIPs were aimed at local issues and intended to resolve these issues by assuring the better participation of individuals and generating social relationships between them and local organizations (e.g. local governments and/or communities)

Limited use of technology in SIPs

In Uzbekistan, SIPs used ICTs in rare cases. In that sense, the criterion of using technology in SIPs has not been fully met in Uzbekistan. In fact, social innovations should not necessarily be high-tech solutions. In Uzbekistan the biggest share of the SIPs were low-tech initiatives. For instance, only 11 SIPs out of 33 supported were using technology of any kind [ICTs or engineering works].[21]

Another reason for having less ICT-based SIPs is that UNDP and the UNDP/UNV project tried to have more SIPs in rural areas of Uzbekistan, involving individuals coming from these areas. Pressing social problems in rural regions of Uzbekistan did not often require ICT-based solutions. In this regard, Khamidova claims:

"We wanted to go outside of Tashkent. A lot of things are going on in the capital [in Tashkent]. Youth have more opportunities here. But what about rural youth? What about rural problems? We wanted to give them a chance. We have even prioritized the selection of projects from rural areas. They have very basic problems with water, electricity, and heating. If any project wants to address these issues, we picked it up."[22]

One of such SIPs was 'shower and water supply', designed for local farms in local communities of the Bukhara region. It could be used in the fields of rural areas to keep and warm up water (a water supply system),

[21] The UNDP/UNV 'Social Innovation and Volunteerism in Uzbekistan' project, Final Evaluation Report, 2014, p. 24.

[22] Interview, Sevara Khamidova. Via IMO Messenger. November 2017.

allowing for the efficient collection, saving and distribution of water for hygienic purposes in rural areas (e.g., farms). The project was conducted by a group of young people led by Ikhtiyor Kamalov. Knowing about the problem of scarce water resources in rural regions of Uzbekistan, Ikhtiyor Kamalov and his team from Bukhara region, came up with the invention which was helpful in saving and efficiently using scarce water resources. They planned to equip local farms with this system, helping them cope with the problem of water scarcity, and aiding them in using water to meet the daily needs of farmers who spend most of their time on farms.

ICT-based SIPs were predominantly implemented in urban areas. For instance, Infobox project in Bukhara, or E-dairy project in Tashkent are the good examples of such projects. Later in 2019, 'Yuksalish' Nationwide movement and P4I Project supported 25 projects that mostly applied ICT elements in form of a website (website for recruiting volunteers) or a chat bot (to receive psychological support during COVID-19).

Social impact: a different understanding and an assessment problem

Any social innovation is supposed to make a social impact. According to social practice theory, since social innovations operate on micro, meso and macro levels, they can also make impacts on those levels. On the micro level, social innovations can address local problems. However, the goal of social innovation is to enable social change on a macro level.

SIPs implemented in Uzbekistan in 2012–2014 and later in 2019 were not assessed for the social impact made with adequate measurement tools by any project operator, so this criterion has not hitherto been met.

The UNDP and the UNDP/UNV 'Social Innovation and Volunteerism in Uzbekistan' Project regarded social impact from SIPs as being the identification of social challenges, and the establishment of new social

relationships to tackle these challenges. For instance, Khamidova mentions the following criteria applied to SIPs: “first, existing practices used in a new manner (new partnership, new elements, and new combinations); second, changing life in local communities through identification of their problems and offering new solutions”.[23]

The UNDP/UNV ‘Social Innovation and Volunteerism in Uzbekistan’ Project followed the logic of problem identification and the creation of relationships to solve the problem. The UNDP/UNV Project could help to establish such relationships which would otherwise be impossible.

In the case of other SIPs, for instance, Infobox, E-Diary, Fantasy Club or Peers Club, the impact from the projects was intended to take place through establishing social relationships between people, and/or people and organizations, that otherwise would not have been established. Infobox implied the collaboration of individuals and local authorities, the E-Diary project established cooperation between parents, teachers and students, the Fantasy Club project encouraged networking between individuals with disabilities and the local public school, and the Peers Club allowed for a partnership among peers in a local community.

Scaling up: Scant possibility of diffusion

According to social practice theory, any invention should be repeated, or in other words, diffused or scaled up. Repetition or diffusion/scaling up is needed to achieve, over time, a sustainable social change. SIPs supported by the UNDP/UNV project were expected to be scaled up, and UNDP was seeking opportunities for this. However, this was problematic due to the lack of support of local projects by the decision-makers. Some occasional collaborations could allow for scaling up, but overall, this criterion of social

[23] Interview, Sevara Khamidova. Via IMO Messenger. November 2017.

practice theory has not yet been achieved.

For instance, Ulugbek Musabekov, who led the E-dairy project in his local community, recalled: “we tested our project in one school. It was possible, because it was the school where I studied myself, and the teachers knew me there. To spread my project across the city, I would need additional support”.[24] Umid Gafurov also mentions similar problems regarding his local project: “in case of government, Infobox could help them to interact with local people by internet, answering their questions, help to solve their problems. This did not happen though”.[25]

Clearly, the inability to scale-up SIPs was a problem which inhibited their further progress. Local organizations were not always eager to pick up SIPs to make them more sustainable. Sometimes projects that have been successfully tested in Tashkent and could be replicated in other regions of Uzbekistan have not been supported by local governments in those regions.

Between 2012 and 2014 only in one case collaboration between the social (‘Ipak suzana’) and private (‘Korzinka.uz’) enterprises to generate the SIP took place. According to the Final Evaluation Report of the UNDP/UNV ‘Social Innovation and Volunteerism in Uzbekistan’ project, after the project with ‘Korzinka.uz’ was launched in Tashkent, other private retail chains such as ‘Next’ and ‘Makro’ also ordered eco-bags. In total, sixteen thousand eco-bags were produced and sold by the year 2014.[26]

Social change: something everybody wants, but could not yet achieve

Theoretically speaking, social change is the last stage of the social innovation cycle. Social practice theory emphasizes that social practices

[24] Interview, Ulugbek Musabekov. November 2017.

[25] Interview, Umid Gafurov. November 2017.

[26] The UNDP/UNV ‘Social Innovation and Volunteerism in Uzbekistan’ project, Final Evaluation Report, 2014, p. 23.

should be diffused and institutionalized to enable social change. In Uzbekistan, it was not easy to gauge whether the projects are able to make the required social change. It was too early for these SIPs to qualify for the final social innovation generation stage, namely, making a social change in society.

4. Conclusion

This paper discussed features of ‘social innovations’ in Uzbekistan and analysed how SIPs fared as social innovations. While doing so, the research helped to identify contradictions, gains and challenges related to SIPs in Uzbekistan and analysed how they were handled. For instance, SIPs have been new social actions in existing social context of post-Soviet Uzbekistan. People (human) - centred approach was a priority in all SIPs. It has particularly emphasized the lacking government support of SIPs in 2012-2014, partly compensated by the occasional cooperation of the leaders of SIPs and local organizations. SIPs were addressing certain needs in local communities, but their social impact was not measured. It also highlighted the problems related to the diffusion of SIPs, and measuring their social impact. It identified the random use of ICTs in SIPs in Uzbekistan and explained how international donors evaluated the social impact from the SIPs as a tool for problem identification and creation of new social relations.

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Types of connectivity in and around Central Asia

Farkhod Tolipov*

Abstract: The paper conceptually analyses types of connectivity inside and outside Central Asia. It proposes to consider connectivity on the micro- and macro-level: local and intra-regional efforts on connectivity being micro-level and inter-regional (like Central and South Asia) and continental processes being macro-level. Also, the specific Central Asian context requires consideration of connectivity issue through the prism of such concepts as pacifism, mercantilism and geopolitics.

In this respect, Central Asia is facing quite challenging perspectives, in terms of prioritization: Russia-led Euro-Asian Economic Union; China-led Belt and Road Initiative; and Central Asian own regional integration/connectivity.

The buzzword "connectivity"

The term "connectivity" becomes a mantra in political and analytical discourses regarding Central Asian countries' endeavour to develop wide web of links with adjacent as well as remoter regions. This is, indeed, a sign of our time when globalization and regionalization stipulate multiple connectivity projects and policies. One of such endeavours is the long-lasting efforts of Uzbekistan and other Central Asian countries to get out of their so-called land-locked conditions and reach out the world markets through getting

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access to the sea ports.

In July 2021 Uzbekistan initiated a big-high level international conference “Central and South Asia: Regional Connectivity. Challenges and opportunities” in Tashkent. It is supposed that: “The strategic objective of connectivity must be to expand trade and economic relations between the two regions and beyond. Central and South Asian connectivity will add new dimension and momentum to plans to build various New Silk Road corridors running along the east-west axis. Enhanced connectivity between the two regions will help substantially in the development of all other connectivity plans, including the Central Asia Regional Economic Cooperation (CAREC), the Economic Cooperation Organization (ECO), the Shanghai Cooperation Organization (SCO), the Eurasian Economic Union, the Belt and Road Initiative (BRI) and the China Pakistan Economic Corridor (CPEC)”.[1]

But what is ‘connectivity’? This concept lacks precise definition. It would be a simplification to perceive connectivity as just a mechanical connection of unconnected transport segments. In politics and international relations, the understanding of dynamics of certain processes depends on understanding of a number of aspects of the context in which these processes are unfolding. One should not forget that states in the international system pursue their own national interests. From this point of view the concept of connectivity issue in the Central Asian context, in my opinion, can be considered from the following three approaches: pacifism mercantilism, geopolitics.

Pacifism is about the environment of peace and stability. It’s about the purposeful policy and efforts directed to bringing peace to the war-torn country, strengthening peace and conditions for peace there. So, connectivity is believed to be a condition for peace and vice versa: peace is a condition

[1] The Tashkent conference “Central and South Asia: Regional Connectivity. Challenges and Opportunities” signals the beginning of a new era in the history of the region https://isrs.uz/en/xalqaro-hamkorlik/taskentskaa-konferencia-centralnaa-i-uznaa-azia-regionalnoe-vzaimosvazannosti-vyzovy-i-vozmoznosti-kak-signal-o-nacale-novoj-ery-v-istorii-regiona, 19/08/2021

for connectivity.

Mercantilism is about material and financial benefits pursued with regard to connectivity issue. Establishing transport corridors and development of the necessary infrastructure along those corridors, obviously, facilitate trade between countries.

Geopolitics is about sphere of influence and territorial control aspired by great powers in their competition and rivalry vis-à-vis each other.

By combining this threefold context, one can assume, as Parag Khanna did, that:

"The nature of geopolitical competition is evolving from war over territory to war over connectivity. Competing over connectivity plays out as a tug-of-war over global supply chains, energy markets, industrial production, and the valuable flows of finance, technology, knowledge, and talent. Tug-of-war represents the shift from a war between systems (capitalism versus communism) to a war within one collective supply chain system. While military warfare is a regular threat, tug-of-war is a perpetual reality – to be won by economic master planning rather than military doctrine. Around the world, thousands of new cities or special economic zones (SEZs) have been constructed to help societies get themselves on the map in the global tug-of-war".[2]

At the same time, connectivity should not be for the sake of connectivity, and we should differentiate between synthetic and organic connectivity. The former means artificial structure which serves the interests of narrow group of actors at the both destinations which are to be connected disregarding the development goals of all areas between these destinations. The latter means more harmonious endeavour aiming at engaging local population with

[2] Parag Khanna. "Connectography: Mapping the Future of Global Civilization". (New York: Random House, 2016), p.13.

various connectivity-related projects in order to satisfy its needs make the overall connectivity beneficial for it.

Therefore, connectivity between Central Asia and South Asia is simultaneously the issue of pacifism, mercantilism and geopolitics.

OBOR: One Belt, One Road

"One Belt, One Road" (OBOR) is the multidimensional Chinese undertaking by design and by implications. It has economic, transport, geopolitical, cultural, historical and security dimensions and encompasses so vast swaths of Eurasian continent and oceans that it created an impression of global ambitions of China. Central Asia – erstwhile an epicentre of the ancient Great Silk Road – is once again acquiring a higher profile in the Eurasian and world order, not least due to China's move westward that culminated in OBOR phenomenon. Five Central Asian countries are facing Chinese (great power's) growing "authoritative and persuasive" presence in the region. Central Asian shape of OBOR will be created in the geopolitically galvanized area, that's why its progress is expected to be complicated, with immanent challenges and long-term geopolitical implications.

This is perhaps the major topic widely discussed by the expert community and political circles due to its overambitious and global character. The Silk Road Economic Belt (SREB) – the Central Asian segment of OBOR – is envisaged to cover the Central Asian region as perhaps the most essential and indispensable part, a somewhat "turning point" in China's "Go West" dream projection. In other words, if Central Asia is fully and successfully attached to the SREB, then the OBOR will provide China with direct and quick access to the Middle East and Europe.

It should be noted that analysts predicted this outcome as early as the 1990s: "A new Silk Road of modern railroads and highways that would

effectively give China a land route far to the west, ultimately to Europe and to an Iranian opening on the Persian Gulf, would have enormous strategic consequences, possibly comparable to the impact that the advent of the Suez and Panama Canals once had". Some analysts recalled the notion of the Marshall Plan as applied to China's endeavour in Central Asia. This endeavour created an impression of Chinese tutelage over the region in some version of the Marshall Plan.

If OBOR-type of connection implies only transport-logistical that is transit-related question, we will have one approach to the problem; but if the connection implies broader issue of the comprehensive regional development, we will have another approach. Today many are primarily focused on the former approach simplifying thereby the task of the exploration. But even consideration of the problem through transport-logistical lenses encounters various challenges. In general, strategic implication can be understood as a dilemma: Transit and/or development?

From this viewpoint, "if tangible benefits are not identified and communicated to local populations, then the SREB will not only fail to reach its full potential; it could also raise suspicions that this is more of a geopolitical project than China says, with China benefiting far more than the Central Asian populations and gaining further leverage over the region's political elites through economic influence".[3]

OBOR: Own Belt, Own Road

But two other types of connectivity need to be prioritized before the other ones: inside Central Asia and inside Afghanistan.

[3] Sarah Lain. "Trade Connectivity: the missing link in the belt and road", in China and Central Asia, December 11, 2016, http://chinaincentralasia.com/2016/12/11/trade-connectivity-the-missing-link-in-the-belt-and-road/

Regarding Central Asia:

Five states of the region – Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan – have long been engaged in the regional integration endeavour. This process was quite complicated, with its ups and downs. Integration itself, by definition, is a form of deep and strong connectivity between countries concerned. There were and there are numerous joint projects among Central Asian countries, including in the sphere of transport, infrastructure and logistics which are supposed to improve and strengthen connectivity between them.

However, regional integration – a somewhat highest point of connectivity – remains a bit sluggish process. The integration project that was proclaimed in 1991 has passed through several important stages of institutionalization until 2006 but was frozen for about a decade, and in 2017 it was revitalized in a more modest form of Consultative Meetings (CM). In the frameworks of CM presidents adopted Joint Statements which reflect their common intentions to develop closer cooperation on regional issues. For example, the Joint Statement of 2021 CM displayed such intentions as simplification of trade procedures in the region; development of trade-production platforms on the borderland territories as well as the network of wholesale-distribution centres; etc. In addition, the roadmap is envisaged to be worked out on development of the regional cooperation for the period of 2022-2024.

On 10 April 2021, Prime-Ministers of Uzbekistan A. Aripov and Kazakhstan A. Mamin launched the large project of building the “Central Asia” International Centre of Trade-Economic Cooperation on the border between Uzbekistan and Kazakhstan. The Centre’s daily throughput capacity will be 35 thousand people and 5000 tracks in both directions. Though it is the Uzbekistan-Kazakhstan project its name is symbolically reflecting the immanent regional dimension of it.

It has to be noted that the overall region-wide connectivity efforts began in early 1990-s.

In April 1997 three states – China, Kyrgyzstan and Uzbekistan signed a Memorandum on the construction of the new railroad Andijan (Uzbekistan)-Osh (Kyrgyzstan)-Irkeshtam (Kyrgyz-Chinese border)-Kashgar (China) which would connect up the region and ultimately should connect the Eastern shores of China all the way through to Amsterdam. With the construction of that strategically important segment the railroad systems of China, Central Asia, Iran and Trans-Caucasus can be connected. Thereby the Eastern Chinese export-import port of Lianyungang and Amsterdam will become two ends of one vast transport system. The distance between them is 8000 km shorter than the sea route through the Suez Canal. It is likely that, no less than 30 countries will benefit from the construction of this road. Most importantly, this project will become a crucial segment of the overall regional web of connectivity.

Currently, intra-regional highways and railroads are being constructed between Central Asian countries; thereby, the regional clusters of the New Silk Road are being shaped. Especially, this is peculiar to two key countries of Central Asia – Kazakhstan and Uzbekistan. The reconstruction of the old 99 km long highway connecting Uzbek city Tashkent with Kazakh city Shymkent is underway. Soon it will be the first category international road and an important segment of the “West China – West Europe” transit corridor. Its length in the territory of Kazakhstan is 2787 km.[4] Besides, the railroad is about to be constructed soon connecting the Uzbek town Uchquduq with the Kazakh town Kyzylorda which further has connection to the Russian Ural and Siberia regions.

[4] Капитал, 05.11.2013, http://kapital.kz/gosudarstvo/22958/opredelen-podryadchik-po-stroitelstvu-trassy-tashkent-shymkent.html

By and large, to paraphrase Chinese OBOR, I would characterize the overall aspirations and practical efforts aiming at creating and expanding the connectivity between and among Central Asian countries as ‘Own Belt, Own Road’. It reflects two things: self-value of the regional integration in Central Asia based on stronger connectivity – the process which is far from being completed; prioritization of the region before other regions and projects. Central Asian OBOR is indeed more important and urgent because without it – other transcontinental connectivity projects will appear even less attractive and too ambitious and, therefore, less realizable.

There is much to do within Central Asia, above all. For example, transborder cooperation system needs to be set up fully. This issue is very explicit and acute especially in the Fergana Valley which is shared by three countries of the region – Uzbekistan, Kyrgyzstan and Tajikistan. Many researchers and experts argue that because this area is densely populated it is conflict-prone.

Conflicts causing situations occur often because of problems related to the access of the border communities to water and land. In these districts dualism of domestic economic models – irrigation agriculture and animal husbandry – has been eternal feature of the population of the Fergana Valley. Despite nomadic and sedentary communities in this area are divided in three countries, their interdependence is still felt and benefitted from by this population. The deeper study of this issue reveals that competition over water and land in the Valley occurs not just because these are scarce resources and does not trace to any inherent ethnic animosities regarding scarce resources, but because of the economic and social modes that define the lives of each group and sub-group and set them off from each other.[5]

[5] Bichsel. Ch., Mukhabbatov, Kh., Sherfedinov, L. “Land, Water, and Ecology”, in *Ferghana Valley. The Heart of Central Asia*, edited by S. Frederick Starr (New York: M.E. Sharpe, 2011), p. 265, 272.

Currently, there are also plans to significantly expand the options for cross-border travel by bus with Tashkent-Bishkek, Ferghana-Osh, Andijan-Osh and Tashkent-Issyk-Kul among the routes under consideration. Since 1998 Uzbekistan and Kyrgyzstan have been engaged in negotiations on construction of strategically important 600 km-long highway and 577 km-long railroad Andijan-Osh-Kashgar. As a central segment of the reviving Silk Road routes this project as envisaged will serve Ferghana Valley adjoining countries mainly through spurs and connectors.

Highway started operating on 25 February 2018 when the first convoy of trucks began moving on this transport corridor. Passage of the Uzbek-Kyrgyz border (point “Dustlik”) took 1.5 hour; passage of the Kyrgyz-Chinese border (“Irkeshtam) took about 2 hours. This is the shortest way from Ferghana Valley of Uzbekistan towards China. Delivery of cargo on this new itinerary takes only two days, as compared to 8-10 days along the previous itinerary. For senders and receivers of cargo in the Andijan province of Uzbekistan the multi-modal transport-logistical centre will operate on the base of the “Akhtachi” station.[6]

As for the railroad, thanks to the further connections from Kashgar to Urumchi, and from Andijan west to the Caspian sea, 25 million tons of freight will be able to pass through the Ferghana Valley annually.[7] Good news came in first days of June 2020: the first block-train which consisted of 25 containers with electro-technical products started from “Lanzhou” railway station in China and passed the “China-Kyrgyzstan-Uzbekistan” transport corridor.[8] In this example one can see global (transcontinental) significance

[6] Объявлена дата открытия автодороги Узбекистан-Киргизия-Китай, https://www.fergananews.com/news.php?id=28463 , 19/02/2018.

[7] Bobokulov, I. “The Ferghana Valley and the International Community”, in *Ferghana Valley. The Heart of Central Asia*, edited by S. Frederick Starr (New York: M.E. Sharpe, 2011), p.386.

[8] Запущен первый поезд по транспортному коридору "Китай - Кыргызстан - Узбекистан", https://uz.sputniknews.ru/economy/20200609/14316074/Zapuschen-pervyy-poezd-po-transportnomu-koridoru-Kitay---Kyrgyzstan---Uzbekistan.html 09/06/2020.

of regional connectivity (Andijan-Osh-Irkeshtam-Kashgar).

Meanwhile, there are geopolitical challenges to regional integration and connectivity in Central Asia. The Russia-led Euro-Asian Economic Union (EAEU) is another type and model of connectivity which can diminish and undermine solely Central Asian regional project because of incompatibility of Euro-Asian and Central Asian structures. One example, among many, can illustrate such incompatibility.

In May 2020, a small incident occurred in Sokh between the local Kyrgyz and Uzbek communities over the small spring Chashma. The distance between Sokh and the nearest town Rishton in the mainland of Uzbekistan is about 20 kilometres. However, the Kyrgyz side has blocked this short road for many years and residents of the enclave had to bypass it on another 80-kilometre-long road to get to Rishton. It was blocked due to custom regulations of the Eurasian Economic Union (EEU), of which Kyrgyzstan is a member but Uzbekistan is not. This fact revealed the essential dissonance between the ambiguous membership interests in the EEU and the needs of everyday communication and cooperation between the neighbouring local populations of two Central Asian countries.

War in Ukraine in February-March 2022 and unprecedented sanctions imposed upon Russia made the EAEU future even more dubious. Re-orientation of transport corridors and foreign economic and trade networks, prevention of direct and indirect consequences of Russia’s global isolation for national economies and social moods – all these problems flurry political authorities and public opinion in every country located at the perimeter of the Russian Federation.

In these conditions Central Asian countries should prioritize their regional unity and cohesiveness in order to accelerate regional projects and integration. So, as we see, Russia-led EAEU, China-led BRI and Central

Asian structures are not always harmonious.

Regarding Afghanistan

It must be recognized that Afghanistan now is experiencing the fate of a ‘failed state’ – fragmented, de-moralized, isolated and unmanaged. After Taliban seized power in Afghanistan in August 2021, disconnection of Central and South Asia looks like a permanent reality in this part of the world. Therefore, connectivity inside Afghanistan should be undertaken before connecting Central and South Asia. This country should achieve three types of connectivity: a) social; b) political; c) economic. Social connectivity means overcoming relics of tribal relations and becoming a modern cohesive nation where all ethnic groups live in peace with each other. Political connectivity implies that the state institutions are relatively workable and efficient. Taliban promised to create an inclusive government but so far, didn’t keep their promise. Economic connectivity means the existence of relevant economic sectors and infrastructure and eradication of narcotics economy and cultivation of opiates. Moreover, the territory of this country is becoming the attractive place for different international terrorist groups.

From this perspective, connective in and of Afghanistan is a matter of all – pacifism, mercantilism and geopolitics.

Conclusion

There are various types of connectivity in and around Central Asia. The term ‘connectivity’ should be correctly defined. Especially, in the Central Asian context, this term should not have an abstract meaning and be processed, so to speak, through triple frameworks: pacifism, mercantilism and geopolitics. From dialectical point of view, we should distinguish micro- and macro-connectivity. Micro-connectivity is less visible but no less

strategically important because it is directly related to the local population – its life and well-being. Macro-connectivity is more challenging and geopolitically galvanized.

That's why, our understanding of overall connectivity issue and prospects of its realization to some extent depends on dialectical consideration of micro- and macro-connectivity. These two scales of connectivity, in turn, are interdependent and mutually supplementary.

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4. Капитал, 05.11.2013, http://kapital.kz/gosudarstvo/22958/opredelen-podryadchik-po-stroitelstvu-trassy-tashkent-shymkent.html

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The perspective of Uzbekistan in the GSP+ system implementing Pakistan's experience in developing the textile industry

Saodat Umarova*

Abstract: In the article, the author reveals the essence of the reforms carried out by the government of Pakistan in textile industry, and also indicates what transformations can be carried out in the textile industry of Uzbekistan to increase export potential and grow production within the country. This study provides the current state of the textile industry in Uzbekistan in the framework of the country's recent approval of using the benefits of the EU's GSP+ mechanism. At the same time, the author pays attention to a comparative analysis of the textile industry of Pakistan and Uzbekistan in the context of overcoming obstacles and making full use of the capabilities of the European GSP + system. The author also points out a number of problems existing in textile sector, which may have negative affect on the implementation of the GSP+ mechanism potential.

Uzbekistan becoming GSP+ member

Uzbekistan opens up new horizons for the development of an export-oriented economy in the GSP+ system of preferences. In this context, the development of light industry plays a particularly important role. It is important to carry out a number of key reforms, create favourable conditions for exporters, and stimulate the development of small and medium-sized businesses to increase the scale of production and rise the competitiveness

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of Uzbek textiles. Uzbekistan is one of the leading cotton-producing countries and has historical prerequisites for the development of textile sector. Studying and applying the experience of transforming the textile industry of Pakistan, during the period of entry into the GSP + will help Uzbekistan in organizing the production of textile sector and building up export potential. The article examines key reforms that have had a positive effect on industry productivity growth, textile exports, the technological development of small firms, and increased competitiveness in the global market.

Evolution of the GSP Mechanism in EU Foreign Trade

The Generalized Scheme of Preferences (GSP) of the EU was first introduced in 1971, when the EU played a leading role in establishing a policy of unilateral trade preferences to reduce poverty, which was still characteristic of most industrialized countries[1]. Over time, the GSP has formed the basis of the EU's commitment to take on a regulatory role in global trade for sustainable development. The main point of the GSP is to help developing countries to facilitate the export of their goods to the European Union with reduced tariffs.

In 2004, GSP became regulated, and the entire GSP system was divided into three levels of tariff preferences and obligations, depending on the level of development of the beneficiary country. Under the GSP general agreement, beneficiaries receive a reduction in duties on 66 percent of the tariff lines of goods imported into the EU[2]. The second type of beneficiary countries is regulated by GSP+, this agreement gives developing countries an incentive to benefit from zero duties on the same tariff lines. Inclusion in

[1] “Generalized System of Preferences” UNCTAD web-site - https://unctad.org/topic/trade-agreements/generalized-system-of-preferences

[2] Regulation (EU) no 978/2012 of the European parliament and of the council of 25 October 2012 Веб-сайт ЕС // https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0978/

the ranks of the GSP+ countries depend on the implementation of the core conventions in the field of human rights, labour, governance and other conventions in the field of sustainable development. Finally, the "Everything but arms" agreement (EBA) provides duty-free access for imports of all types of goods from the least developed countries, with the exception of weapons[3]. The program will no longer end every three years due to the current pandemic situation. The agreement with the countries will be extended for 10 years, which will give confidence to importers and exporters. New GSP rules established by the European Parliament to strengthen the supervision system (every two years instead of three years). Currently, 9 countries are members of the GSP+ agreement: Armenia, Bolivia, Cape Verde, Kyrgyzstan, Mongolia, Pakistan, Philippines, Sri Lanka and Uzbekistan[4].

GSP+ is not automatically renewed, in order to renew the membership status, a country must meet several requirements, which are specified in Regulation No. 978/2012 of the European Parliament and of the Council of October 25, 2012 "On the application of the scheme of general tariff preferences and repealing Council Regulation No. 732/2008". The GSP+ status will be extended for countries that were assessed as "vulnerable" in the profile of trade with the EU: a) the import share is the three-year average share of GSP-covered imports of the specific beneficiary country, relative to the GSP-covered imports of all GSP countries; b) this average has to be lower than 6.5 percent in order to qualify for GSP+ the seven largest sections of the GSP-covered imports represent 75 percent of total GSP imports by that country over a three-year period[5]

[3] “Generalised Scheme of Preferences (GSP)” European Commission web-site // https://ec.europa.eu/trade/policy/countries-and-regions/development/generalised-scheme-of-preferences/

[4] Ibit

[5] Regulation (EU) no 978/2012 of the European parliament and of the council of 25 October 2012, European Commission web-site// https://trade.ec.europa.eu/access-to-markets/en/content/generalised-scheme-preferences-plus-gsp

Foreign trade turnover of Uzbekistan with the EU on the threshold of participation in the GSP+ program

Uzbekistan applied for inclusion in the GSP+ (Generalized Scheme of Preferences) on June 4, 2020 and received member status on April 10, 2021[6]. To be included in the GSP+ list, Uzbekistan has made serious efforts to eliminate the systematic use of child labour in the cotton harvest and production processes in Uzbekistan, in addition, the world community has noted positive developments in human rights. The ILO, in its independent monitoring of the cotton harvest in 2018, confirmed the end of the systematic use of child labour in the cotton harvest[7]. The ILO's third-party monitoring of the 2019 cotton crop concluded that systematic use of forced labour by adults and children had been eliminated in Uzbekistan's cotton fields. These results have been confirmed in the latest ILO report on independent monitoring of the 2020 cotton crop[8]. On March, 2022, the ILO has announced a complete cessation of forced labour in the cotton fields of Uzbekistan[9].

Uzbekistan maintains a stable trade turnover with the EU. According to the data of the European Union, in 2020 Uzbekistan's exports to the EU amounted to 200 million euros, 54 million euros or 30 percent of total export refers to the textile industry, 3.7 percent of total exports or 7 million euros are ready-made clothes.

[6] "Uzbekistan joins the European Union special agreement GSP+", Веб-сайт European External Action Service (EEAS) // https://eeas.europa.eu/headquarters/headquarters-homepage/96984/uzbekistan-joins-european-union-special-agreement-gsp_en/

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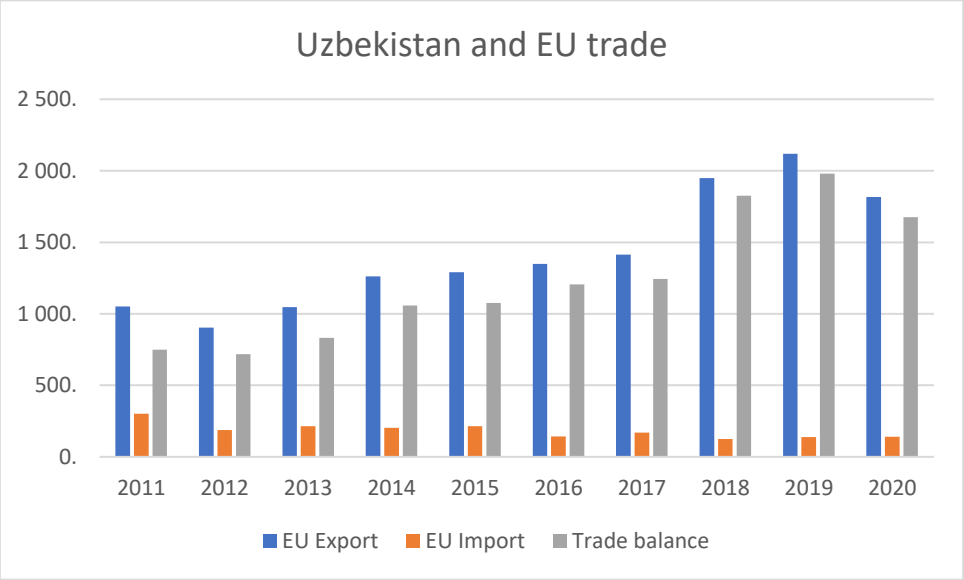
[8] "Report on the assessment of the application for GSP+ by the Republic of Uzbekistan Accompanying the document Commission Delegated Regulation (EU)" Веб-сайт Европейской Комиссии // https://ec.europa.eu/transparency/documents-register/detail?ref=SWD(2020)297&lang=en

[9] "Uzbek cotton is free from systemic child labour and forced labour" ILO web-site https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_838396/lang--en/index.htm

Diagram 1

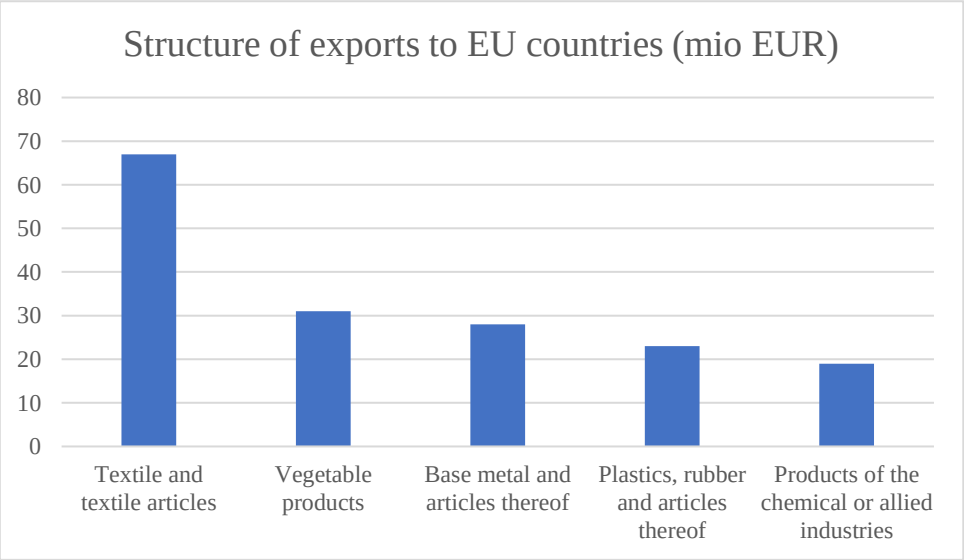
Trade turnover between the European Union and Uzbekistan (2010-2020)



Source: Directorate-General for Trade

Diagram 2

The structure of Uzbekistan's exports to the EU in 2020 (the top 5 groups of goods are listed, which in general account for 84 percent of exports)



Source: GSP Hub website

Diagram 3

Export of textile goods from Uzbekistan to the EU (2017-2020)

Source: Directorate-General for Trade

The structure of textile industry export in 2021

In terms of textile exports in 2021 compared to 2020, a sharp jump was observed in the export of the following goods: cotton - 60.5 percent, chemical fibres - 74.8 percent, carpets - 43.9 percent, knitwear and linen – 30 percent. In 2021, Uzbekistan exported $1.92 billion worth of cotton, which is $726 million more than cotton exports in 2020. Export of carpets in 2021 amounted to 42.1 million US dollars. The main exporting countries of carpets of Uzbekistan in 2021 were Kyrgyzstan - 20.3 million, Azerbaijan - 7.4 million, Russia - 4.2 million[10]. At the end of 2021, the total volume of exports of the textile industry amounted to more than 2 billion 649 million US dollars[11]

[10] Data from the state committee for statistics of the Republic of Uzbekistan

[11] https://nuz.uz/ekonomika-i-finansy/1218661-uzbekskomu-tekstilyu-propisana-tabletka-dlya-rosta-eksporta.html

Light industry of Uzbekistan: prerequisites for participation in GSP+

On March 21, 2017, the Council of the European Union, based on the positive decision of the Committee of the Council on Trade Policy in the Iron and Steel, Textile and Other Industrial Sectors (STIS) and the Committee of Permanent Representatives of the EU Member States to the European Union (COREPER II), without further discussion, took a final decision on the approval of the Textile Protocol[12]. From that moment on, Uzbekistan began to actively export textile products to the EU countries. The International Labour Organization at that time had already announced positive developments in the use of forced and child labour in the cotton fields of Uzbekistan. Also in 2019, the first organic cotton certified by a European certification company was grown in Uzbekistan[13]. Currently, all barriers to the export of cotton and textile products have been removed and Uzbekistan is a full-fledged trading partner of European countries.

By 2020, more than 180 enterprises have been created in the industry with the participation of foreign investors from Germany, Switzerland, South Korea, Japan, Singapore, Turkey, the USA, India, etc. More than 150 projects have also been implemented and specialized in the production of ready-made clothing such as sportswear, clothing for adults, children's clothing, underwear, etc. In the structure of the industry there are 1750 enterprises of the textile and sewing-knitting industry, including: 410 enterprises of the textile industry, 10 engineering enterprises, 1330 enterprises of the sewing-knitting industry, 75 cotton-textile clusters. The proportion of cotton fibre processing by domestic consumers reached up to 50 percent of the

[12] «Textile Protocol between Uzbekistan and the EU enter into force» 20.06.2017, // https://brussels-express.eu/textile-protocol-uzbekistan-eu-enter-force/

[13] Caglar Erdogan, Senior Agriculture Marketing Specialist, “Cotton and Products Annual” Turkey, 2020, USDA FAS, GAIN, //

production volume[14]. In physical terms, the production of the main range of products was ensured, including: yarn - 426.5 thousand tons (growth rate is 106.7 percent), fabrics - 301 million square meters. m (109.1 percent), knitwear - 95.8 thousand tons (111.9 percent), knitwear - 310.0 million pieces (116.8 percent), hosiery - 181.5 million. steam (112.8 percent), garments - 351.6 billion sums (114 percent), nonwovens - 34.2 million square meters (102.7 percent), wate - 33.6 thousand tons (106.5 percent). As a result of the measures taken, the average capacity utilization rate in the production of yarn was – 80 percent, fabrics - 72.8 percent, knitted fabric - 75.4 percent, knitwear – 76 percent, garments - 68.1 percent. For January-September this year the sample of cotton fibre amounted to 601 thousand tons, including 410 thousand tons of cotton-textile clusters[15].

Mostly in the structure of textile exports to the EU are listed cotton yarn, cotton fabrics, raw cotton, T-shirts, shirts. All these goods account for approximately 27 percent of Uzbekistan's total exports to the EU[16]. While Uzbekistan has ample opportunities to export a wide variety of textile products. In the future, textile exports can be differentiated by such goods as bed linen, towels, uniforms, carpets, wadding, felt, etc. In 2020, Uzbekistan's textile export revenues were $2.11 billion, which accounted for 13.95 percent of total exports, and compared to 2019, textile exports increased by 8.44 percent[17].

[14] "Light industry of the Republic of Uzbekistan" Website of the textile portal // https://etextile.uz/o-nas/prezentatsiya-legkoy-promyishlennosti/

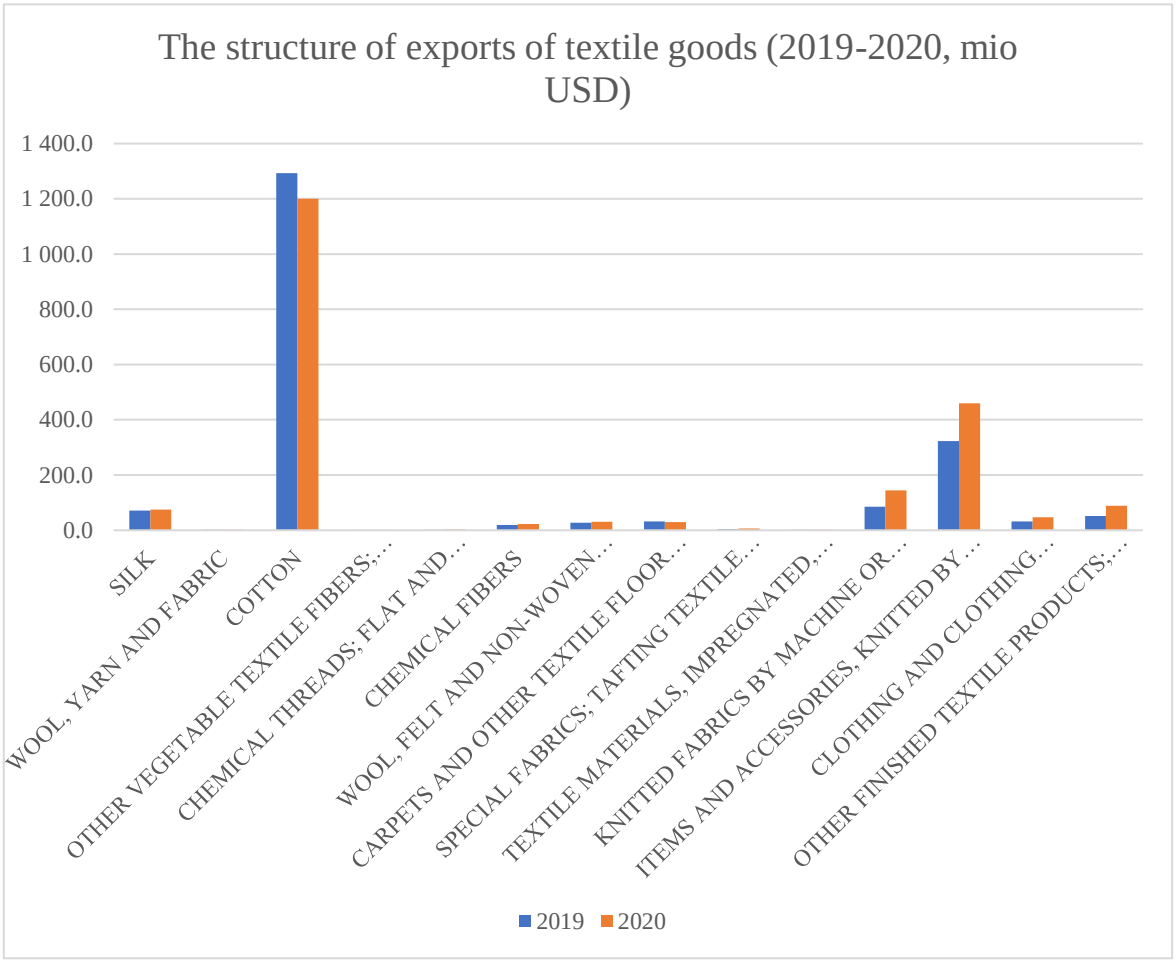
[15] “The main results of the socio-economic development of the Uztextile Association for January-September 2020” Web-site of Uztextile Association// https://uzts.uz/otchety/

[16] “European Union, Trade in goods with Uzbekistan”, European Commission, Directorate-General for Trade, Веб-сайт Европейской Комиссии // https://webgate.ec.europa.eu/isdb_results/factsheets/country/details_uzbekistan_en.pdf

[17] Data of the State Committee of the Republic of Uzbekistan on statistics // https://stat.uz/ru/ofitsialnaya-statistika/merchandise-trade

Diagram 4

The structure of exports for all countries of textile industry goods (2019-2020)



Source: The State Committee of the Republic of Uzbekistan on Statistics

Pakistan's experience in the modernization of textile production in the framework of participation in the GSP + mechanism

Pakistan received GSP+ status in January 2014 and since then the country has experienced rapid growth in trade with the EU. Pakistan is one of the main exporters of textile products to the European Union. Uzbekistan and Pakistan are united by the fact that they are one of the world leaders in cotton production. In 2020, Pakistan produced 980 thousand tons of cotton,

and Uzbekistan 762 thousand tons of cotton[18]. In addition, Pakistan is one of the leading cotton consumer countries. Meanwhile, Pakistan's textile export revenue in 2021 was $25.3 billion[19], and Uzbekistan's textile export revenue in 2021 was $2.6 billion.[20]

According EU's GSP+ assessment report on Pakistan, EU imports from Pakistan doubled between 2008 and 2018 from €3.6bn to €6.8bn, and import growth increased between 2014 and 2016, rising by 30 percent[21]. According to Pakistan Business Council (PBC) report "Pakistan's performance under EU GSP+: 2014-2019", under GSP+, EU imports from Pakistan grew from $7.2 billion in 2013 to $9.7 billion in 2019 - an increase of approximately 34.7 percent[22].

Under the GSP+ mechanism, Pakistan has been granted duty-free market access for more than 6,300 tariff lines, Pakistan is the beneficiary of 900 tariff lines that belong to the textile industry[23]. In 2019, the EU accounted for 46.8 percent of the country's total trade[24]. Moreover, EU is Pakistan's third largest import partner after China and the UAE. Based on this assessment,

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[18] "Leading cotton producing countries worldwide in 2020/2021" M. Shahbandeh, Aug 24, 2021 // https://www.statista.com/statistics/263055/cotton-production-worldwide-by-top-countries/

[19] Pakistan's top commerce official wants continued support for exports despite fiscal tightening // https://www.reuters.com/markets/asia/pakistans-top-commerce-official-wants-continued-support-exports-despite-fiscal-2022-01-10/#:~:text=Pakistan's%20exports%20hit%20a%20historic,after%20a%20coronavirus%2Dinduced%20slump

[20] Uzbekistan Textiles and Clothing Exports. // World Integrated Trade Solution, 2021, // https://wits.worldbank.org/CountryProfile/en/Country/UZB/Year/2019/TradeFlow/Export/Partner/all/Product/50-63_TextCloth

[21] "The EU Special Incentive Arrangement for Sustainable Development and Good Governance ('GSP+') assessment of Pakistan covering the period 2018 - 2019" European Commission web-site, 10.02.2020, // https://ec.europa.eu/transparency/documents-register/detail?ref=SWD(2020)22&lang=en

[22] Samir S. Amir Rabia Tariq Khizer Faisal, "Pakistan's Trade with the EU & its Member States", October 2020, The Pakistan Business Council, // https://www.pbc.org.pk/wp-content/uploads/Pakistans-Trade-with-the-EU-its-Member-States.pdf

[23] Joint report to the European parliament and the council Report on the Generalised Scheme of Preferences covering the period 2018-2019, Brussels, 10.02.2020 JOIN (2020), High representative of the European Union for foreign affairs and security policy, // https://trade.ec.europa.eu/doclib/docs/2020/february/tradoc_158619.pdf

[24] Samir S. Amir Rabia Tariq Khizer Faisal, "Pakistan's Trade with the EU & its Member States", October 2020, The Pakistan Business Council, // https://www.pbc.org.pk/wp-content/uploads/Pakistans-Trade-with-the-EU-its-Member-States.pdf

it is safe to say that GSP+ status has had a positive impact on Pakistan's exports as there has been an overall favourable trend in Pakistan's exports to the EU over the past six years.

According to Khurram Mukhtar, former chairman of the Pakistan Textile Exporters Association, the following reforms have played a key role in the rise of the country's textile industry[25]:

• reduction of electricity tariffs for exporters,

• decrease in interest rates,

• payment of sales tax and other payments,

• market exchange rate

• availability of subsidized working capital and long-term financing.

One of the components of the investment policy in 2013 was a document adopted on the threshold of joining GSP+. It was the "Law on Special Economic Zones (SEZ)", which allowed the creation of processing zones in the country[26]. Benefits for businesses located on a minimum area of 50 acres included:

• duty free import of capital goods;

• exemption from income tax;

• infrastructure support;

• permits for domestic power generation;

• one-stop-shop facilities managed by the Board of Investment for administrative and compliance requirements;

• use of a dry port;

• security compliance (Pakistan BOI, 2013).

[25] “Time to walk on a different path” Nasir Jamal, January 11, 2021, // https://www.dawn.com/news/1600798

[26] Muhammad Muzammil Ziaa, Shujaa Waqarb , and Beenash Afzal Malikc, “Special Economic Zones (SEZs): A Comparative Analysis for CPEC SEZs in Pakistan”, The Pakistan Journal of social issues, Special Issue, June, 2018

Almost 80 percent of Pakistan's exports go to the EU at preferential rates thanks to the GSP+ system of preferences. About a quarter of goods imported into the EU from Pakistan come from the textile sector, such as bed linen, towels, tablecloths, kitchen textiles. Textile products account for over 60 percent of the country's exports and employ 40 percent of the country's entire labour force[27]. Pakistan's exports to the EU countries in 2020 amounted to 5 billion 537 million euros and fell by 9 percent compared to 2019; 75.4 percent of total exports or 4 billion 178 million euros of total exports are textile products, and ready-made clothes in the amount of 2 billion 388 million euros equalled 43.1 percent of total exports[28].

The report "Pakistan in the global clothing value chain" by Duke University's Global Value Chains Centre (January, 2019) conducted a SWOT analysis of the garment industry in Pakistan[29]. According to the authors of this report, Pakistan has the following strengths in the garment industry:

• The status of the leading producer of cotton strengthened the position of the textile leader

• Low labour costs provide an advantage over some regional competitors

• GSP+ gives access to EU markets

• Textile enterprises are owned by Pakistani citizens, which gives a closer view of the market for processing and marketing products.

• The textile industry has an institutional framework that is interested in the development of the

• The China-Pakistan Economic Corridor project have a positive impact on infrastructure.

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[27] Export boost of textile industry of Pakistan by availing EU's GSP Plus By Shah Mehmood WAGAN, Journal of Economics Library, 2015

[28] "European Union, Trade in goods with Pakistan", European Commission, Directorate-General for Trade, Веб-сайт Европейской Комиссии // https://webgate.ec.europa.eu/isdb_results/factsheets/country/details_pakistan_en.pdf

[29] «Pakistan in the Apparel Global Value Chain», Duke Global Value Chains Center, Duke University, Stacey Frederick and Jack Daly, January, 2019

Diagram 5

Textile exports of Pakistan

Source: Pakistan Textiles and Clothing Exports. World Integrated Trade Solution, 2021.

Conclusion

In Pakistan, the textile production is regulated by the Ministry of Textile Industry, which sets policies and strategies for the entire sector. In addition, there are also many educational institutions and organizations specialized in the T&A (Textile and Apparel) industry in the country. There are two main universities that provide programs of study in textiles and clothing: the National Textile University and the Textile Institute of Pakistan. Important technical training institutions for various stages of the supply chain in Pakistan include training centres established by the Ministry of Commerce, the Ministry of Textiles and the Pakistan Textile Exporters Association.

Rapid technological change pervades all activities, rendering old technology obsolete even in low-wage countries like Pakistan. In the case of Uzbekistan, the organization of production logistics plays an incredibly important role, from the supply of raw materials to the choice of the delivery

route to the supplier and consumer. Regions that are able to connect to dynamic value chains are experiencing significant and sustained growth in production, exports and employment. The organizational structure and location of production change in response to technical changes. In this regard, the role of transnational corporations (TNCs) is becoming increasingly prominent. Technological advances in transport and communications are enabling multinational companies to locate and manage activities in remote parts of the globe. It is also important to note that high costs and poorly functioning infrastructure can clearly hamper businesses that can be efficient in terms of mastering their own production processes. Finally, technological progress in the field of information, processing, communication and organizational methods of these enterprises leads to a reduction in the economic distance between countries.

International competition is changing rapidly and intensely, indicating that there are many new market opportunities. With few exceptions, global markets are now more open than ever before, and exporters can enter these new markets faster, cheaper and more efficiently. So far, the textile enterprises of Uzbekistan cannot declare the successful solution of these problems. At the level of state policy, the issues of positioning national textile products as a single recognizable brand in the foreign market have not been resolved, and medium-sized businesses have not yet developed an up-to-date marketing policy for exported textile products.

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