

EVALUATING IMPACT OF INFRASTRUCTURE INVESTMENTS IN UZBEKISTAN.

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Agenda

- 1) Economic conditions in Uzbekistan
- 2) PPP Incentives and disincentives
- 3) Challenges and opportunities
- 4) Partnerships among national planning agencies and multilateral development organizations
- 5) Estimate the impact of previous infrastructure investment on economic output in Uzbekistan.
- 6) Policy recommendations

1. Economic conditions for infrastructure investments

- Population: 33 million
- Minimum reserve ratio: 16% (from October 2018)
- Inflation rate: 14%
- GDP = USD 48,76 billion
- Public expenditures/GDP: 56%
- Government debt/GDP: 14% (2017)

Institutional Investments in CIS region

Country					The amount, mln. US		Share, %	Quantity
	ADB	EBRD	IBRD/IDA	NDB	dollars			
Azerbaijan	1	0	0		1		0	2
Armenia	1	0	0		1		0.1	1
Belarus	0	0	0		0		0	0
Kazakhstan	1.2	5	0		6.2		0.3	2
Kyrgyzstan	0	0	32.7		32.7		1.8	3
Moldova		0	0		0		0	0
Russia		0	0	540	540		29.4	2
Tajikistan	12.5	0	0		12.5		1	2
Turkmenistan	0.8	0	0		0.8		0	1
Uzbekistan	644	0	600		1244		67.6	5
Ukraine		1.5	0		1.5		0	1
TOTAL	660.5	6.3	632.7	540	1839.5		100	19
In %	35.9	0.3	34.4	29.4				

Source: EABR, 2018

2. Incentives and disincentives faced by the private sector in infrastructure financing

- Uzbekistan is #1 among all CIS countries in attracting investments and financing in 2018.
- The main objective of PPP is to create conditions for effective interaction of public and private partners
- PPP can be carried out in the fields of science, technology and innovation, medicine, education ...

3. Challenges and opportunities in infrastructure provision for PPPs

- over the past two decades, the PPP mechanism is gaining popularity and is now used in more than 130 developing countries, contributing to attracting 15-20% of infrastructure investments (World Bank, 2017).
- Various problems have been encountered in PPPs in worldwide infrastructure development. One problem is the slow progress in implementation of PPPs. Privately financed projects constitute only a very small portion of the total infrastructure projects (Zhang, 2005).

Reasons for the underdevelopment of public infrastructure:

- The deficit in the infrastructure development is highly related with a dilemma of the economic policy of the government supporting budgetary and macroeconomic strategy, and to create favorable conditions for private sector development, limiting therefore its investment opportunities.
- Failure of infrastructure “to keep up” with growing economy is associated with a progressive physical and moral wear of technologies that were established almost 50 years ago. It leads to mass amortization of production that limits investment opportunities.

Consecutively,

old infrastructure cause low coefficient of efficiency (CE) that is more evident on monopolistic sphere - public utilities. For instance, CE of many boiler-houses does not surpass 65-70%, up to 20% of generated electricity power is lost during delivery process via technical and non-technical ways while water losses in the networks reach up to 50% (CER, 2007).

4. Partnerships among national planning agencies and multilateral development organizations

- Following the strategic programme approved by the Presidential dated 5 October 2017 No UP-4847, the Ministry of Justice published a draft legislation on Private-Public Partnership for wider discussion and comments amongst the expert community.

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- At this stage, the government of Uzbekistan has two main objectives:
 - to relieve pressure on the national budget for funding public infrastructure operations or the provision of public services by allowing a private party to co-invest/invest or to participate, and
 - to improve the performance of public infrastructure and public services by attracting private investors, embracing private entrepreneurial innovations, procuring private expertise and, finally attaining efficiency gain (Aripdjanov, 2017).

Interview with the minister on PPP

- The minister of finance – Mr. Jamshid Kuchkarov provided interview regarding PPP disincentives and challenges
- Government is going to implement three experimental projects with the EBRD:
 - 1) Tashkent-Samarkand highway based on PPP. This is a long-run project assumed to be realized in the next 7-8 years.
 - 2) the construction of airports in regions. The project has high business interests globally and tender is expected in summer 2019.
 - 3) building hospitals where Turkish experience will be referenced.
- Further, the ministry of finance is also planning to implement three experimental projects with the Asian Development Bank. The construction of the electricity power plant is planned based on PPP. Accordingly, there will be an official contract agreement with the state.

4.1 Renewable energy sector

- deputy chairman of JSC UzbekEnergo confirmed that Siemens plans to build the first wind farm in Uzbekistan under the PPP
- UzbekEnergo JSC is now working with Siemens on a project of a 100 MW wind farm in Zarafshan district of Navoi province, with the estimated project cost at US\$ 100 million (Tashkent Times, 2018).
- In 2015, German companies Geo-Net and Intec-Gopa presented a wind atlas that reflects Uzbekistan wind energy potential. Based on the atlas Uzbekenergo identified two promising sites - in Navoi region and the southern Karakalpakstan for further detailed wind energy potential studies.
- Considering the market conditions of energy sector, PPP is the rational solution to create entrepreneurial spirit in energy market of Uzbekistan.

4.2. Natural gas - Gas supply in three regions of Uzbekistan will be based on PPP

- In May 2018, based on the memorandum signed between Uzbekneftegaz and Kazanchi Holding AS, the gas supply in Bukhara and Tashkent and Samarkand districts will be implemented through the PPP.
- It was emphasized that measures to eliminate the sale of non-standard and handicapped gas equipment on the domestic market of domestic and liquefied gas and their step-by-step replacement of energy-efficient and automated gas equipment are under consideration (Xalq So`zi, 2018).

4.3. Transport sector - Uzbekistan is planning to build highways on PPP

- State Committee for Roads and German company Gunther Papenburg are discussing the possibility of construction of highways in Uzbekistan on the principles of public-private partnership.
- Both parties agreed that it is necessary to improve the legislative framework first of all. If the Law "On Public-Private Partnership" appears in 2018, the first private roads will be utilized from 2020. The first toll road can pass from Tashkent to Bukhara via Samarkand. This will be a separate autobahn, parallel to an already existing one.

4.4 Social sector – pre-school education institutions (PEI).

- From April 5, 2018, the President of Uzbekistan signed "On measures to further stimulate and develop the system of pre-school education".
- **According to the resolution, it is planned to introduce the following forms of PPP in the sphere of preschool education:**
 - provision of land plots for permanent use on a non-reimbursable basis for the construction
 - allocation of a land plot for construction or a building for reconstruction
 - Realization of the "zero" redemption value of the empty objects of state property,

PPP Agency was established

- **Public-private partnership agency has been established under the Ministry of Finance that would be responsible for prospects of partnership between the public and private sectors in the Republic of Uzbekistan.**
- Head of the Agency is at the same time a deputy minister of finance

5. Estimate the impact of previous infrastructure investment on economic output in Uzbekistan.

PPPs will require institutional support from the government such as

- the ability to grant tax and customs incentives and exemptions
- authorisation to issue sovereign guarantees for large-scale PPPs at a national level and to provide in-kind contributions by a public partner in the form of land allocation
- the opportunity to provide subsidies and “viability gap funding” for certain PPPs, and assistance in accessing adequate financing in the local currency.
- Since the Government is highly focusing on economic decentralisation reforms in Uzbekistan, and the PPP Law will be a first, but important step.

5.1. Case study: Western Uzbekistan Rural Water Supply Project

- Project costs USD 38 million
- The project was to ensure water supply to about 700,000 people in the Republic of Karakalpakstan and Khorezm Region, of whom about 60% were living below the poverty line, in an area that was suffering from severe water shortage in Aral Sea basin.

Project geography



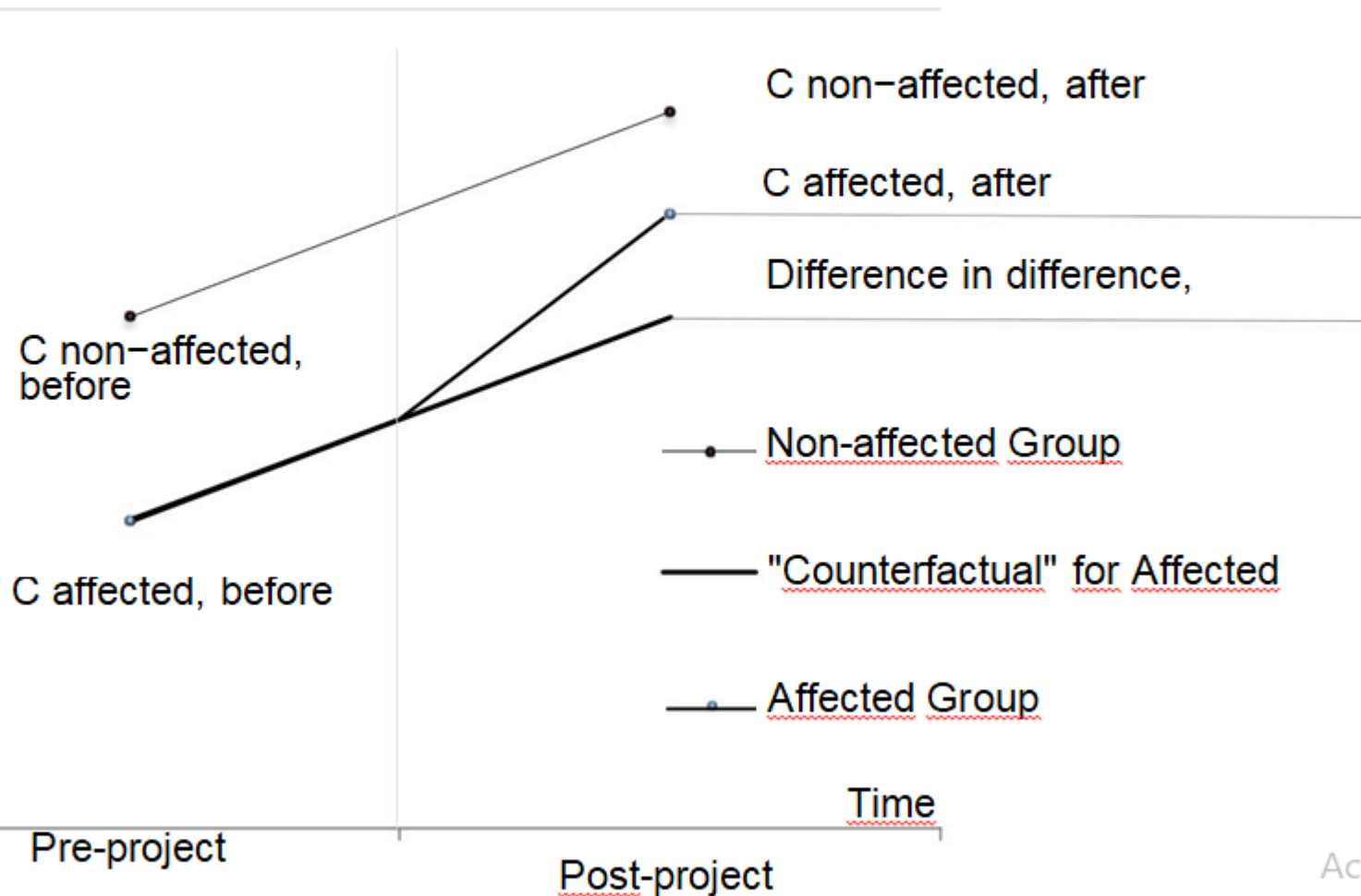
Local economic parameters

	Gross Regional Product (bln Sum)	Local population (`000)	Gross Regional Product per capita (`000 sum)	Regional Tax Revenue (mln Sum)	Average salary	Installed water metering devices	Level of drinking water supply (%)	in rural areas	Diseases (in 100 thousand people)
2006	748558	1478	510	133191	129795	10985	64	56	59900
2007	1003695	1504	672	157611	192207	20904	63	56	66355
2008	1236065	1531	815	239631	308401	32701	62	55	66341
2009	1547800	1562	1001	300009	435882	33302	64	54	54526
2010	1944199	1590	1232	222475	594915	50473	63	53	51283
2011	2306500	1629	1428	276614	700519	52758	63	52	49489
2012	2945806	1654	1795	349396	833148	61450	63	52	40220
2013	3797913	1683	2276	447260	948063	62624	62,1	51,2	39065
2014	4793463	1716	2820	532390	1092556	70328	62,5	51,5	46604
2015	6167696	1747	3287	683919	1081026	84692	69,7	59,8	43884
2016	7093457	1776	3794	731449	1213493	95065	72	62	45136

The economic contribution of the project to the regional development

can be accessed via decreasing public subsidy loss provided by government to the “Tuyamuyin-Urgench” water utility company. Installed **15,357 unit of water meters help to effective, systematized cash-flow mechanism in three districts (Khiva, Kushkupir, Yangiariq) of Khorezm region**. The chosen districts have the lowest access rate to water supply since they are located in remote parts of the region.

Illustration of the Difference-in-Difference Method with a variable of state subsidy loss



Numerical Estimation of the Difference-in-Difference Coefficient for the period 2000–2002 and 2010–2012

Regional group	Outcome	Pre – water metering installation period (2000-2002)	Post – water metering installation period (2010-2012)	Difference
Non-affected group (9 districts of the region)	Loss of public subsidy	UZS 127 <u>mln</u>	UZS 728 <u>mln</u>	601
Affected group (3 districts of the region)	Loss of public subsidy	UZS 106 <u>mln</u>	UZS 649 <u>mln</u>	543
Difference		-21	-79	58

Source: Authors' calculations

Econometric findings

- According to the calculations, difference-in-difference coefficient equals to UZS 58 million when affected group (3 districts funded by ADB project) is compared against non-affected group (remaining 9 districts of Khorezm region). So, the invested districts became less dependent to the public subsidy provided by government.
- Saved money was re-invested to install water meters in non-affected districts of the Khorezm region.

Draft of the Resolution “On measures to organize an effective system of coordination and development of public-private” (ID-44)

The main tasks of the Agency:

- improvement of the legal and institutional base of public-private partnership;
- collaborating with the interested ministries and departments
- assistance to ministries and departments on the basis of their programs of public-private partnerships to develop concepts for specific projects
- consideration of tender documentation, documents concluded on direct negotiations
- cooperation with international financial and donor organizations
- involvement of international experts to participate in the implementation of projects
- Monitoring usage of public funds involved in public-private partnership projects;

Policy recommendations

- In general, there are many steps to follow to maximize the public and private benefit via effective dissemination of PPP mechanisms that promote innovative financing methods for infrastructure projects to ensure sustainable growth in the economy.
- Recently established PPP agency under the Ministry of Finance is expected to become a think tank to learn the global experience and apply to the Uzbek economy considering local conditions.