CREATING OPPORTUNITIES FOR THE DEVELOPMENT OF PUBLIC-PRIVATE PARTNERSHIPS FOR IRRIGATION IN UZBEKISTAN

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The Republic of Uzbekistan has set an ambitious goal of developing PPPs in the irrigation sector. This article examines the various PPPs and the advantages and disadvantages of each for a specific purpose. It reflects the international experiences of PPPs in the field of irrigation and relevant recommendations that can be drawn from them for Uzbekistan.

Keywords: public-private partnership, irrigation sector, public partner, private partner, PPP agreement, potential investors, clusters.

Introduction. In order to successfully apply Public-Private Partnership (PPP) in the field of water management of our country, it is necessary that not only service users are in favor of attracting a private partner, but also that both state and local authorities realize the need for cooperation with the private sector. Otherwise, it is impossible to implement some project on the basis of PPP. Because water consumers and the private sector are directly involved in the management of water infrastructure facilities. This allows management to be organized in accordance with the requirements of the site and it has a positive effect on the very efficient and economical use of water, unlike the methods of managing the water infrastructure that were previously applied uniformly for the entire region.

Therefore, the use of various mechanisms of PPP in water management allows, on the one hand, to increase the efficiency of the use of water resources in agriculture, and on the other hand, to strengthen the trust between business and the state. This is an important condition for the formation of objective opportunities for the sustainable development of the economic activity in question. From this point of view, the PPP implementation process approach has five main elements (Figure 1):

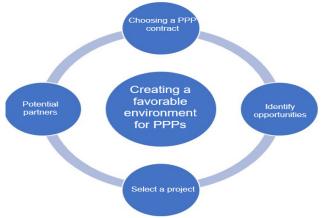


Figure 1. The process of implementing PPP projects

- agree on the type(s) of PPP. Review the government's goals for PPPs, consider what challenges they pose to the country, and assess the appropriate form of PPP contracts based on these factors;
- identifying opportunities for PPPs in the irrigation sector of Uzbekistan, taking into account different situations and needs;
 - defining project selection criteria and starting

project preparation;

- actively work to identify potential private partners that meet project criteria and ensure their interests;
- in addition to the above, making sure that the key elements of creating a favorable environment for PPPs are in place and making necessary efforts to create a positive environment for private sector participation.

These processes can be done sequentially. However, they should be integrally related to each other and not free of some repetitions. For example, consideration should be given to ensuring that each is compatible with the other and how to adapt each to other processes as they develop. Creating a comfortable environment should be started sooner, because it is likely to take the longest time. But in creating this investment environment, it is important to be aware of what kind of projects and partners are intended for.

- I. Choosing a PPP contract. Different types of outsourcing and PPP contracts can be evaluated based on how well they align with each of the government's key objectives for PPP initiatives.
- II. Identify opportunities for PPPs. Opportunities and options of PPP should be suitable for conditions in Uzbekistan. The table below (Figure 2) summarizes the different situations.

Discussion. In summary, the best current opportunities for PPPs in irrigation can be found in the following 5 categories:

- management Service and contracts rehabilitation and partial modernization of existing state irrigation systems, should aim to improve the efficiency and financial sustainability of existing irrigation systems in order to lay the groundwork for later introduction of more advanced forms of PPPs (lease, concession, full nationalization). There may be a case for this among cotton textile clusters and other such agro-processing companies interested in improving the management and facilities of public irrigated areas supplying water to their industries. Another option is that cluster companies can lease public irrigation systems in their areas. Service and management contracts may also apply to multi-crop farms.
- b. Enhanced engineering/design, procurement and construction or ready contracts for accelerated modernization of existing public irrigation systems to cover joint contractor-government activities and study period for the upgraded system.

Figure 2. Analysis of opportunities for PPPs in the irrigation sector of Uzbekistan

Category	International examples for PPPs	Comments on acceptability in the conditions of Uzbekistan
Component of the multi-purpose water management project	Few	Could be a transboundary upstream project (hydropower, drought water storage, flood control, urban, irrigation, etc.). It provides a large amount of "public benefit" that essentially requires state funding.
Creation of new irrigation systems	Peru's Diamond Project	From the identification of new economically irrigable land and, more importantly, the availability of water supplies (e.g. water saved from existing systems)
Creation of new independent water sources and water transportation facilities (including pumping facilities) to supply water to existing irrigated areas	Morocco's Gerdan, Egypt's West Delta projects. Most examples of PPPs are in the renewable energy and wastewater treatment sectors (e.g. small hydro in India, Nepal).	It is unlikely that new large water sources and water transportation facilities will exist in Uzbekistan, only existing water can be diverted from economically unproductive areas. Possible options: i) Build more efficient pumping stations, including solar-powered pumps or small hydroelectric systems where electricity is sold to irrigation agencies;
		ii) Treatment and transportation of treated
4. Improvement of existing infrastructures, modernization in automation, operation and automation, operation and maintenance (O&M) and irrigation recvices in existing farm areas.	Ethiopia: Megech Seraha Mukhuri project of Bangladesh Inda: Kamataka (Narnyanpur)	waterwater for someultural usern mem-tabon areas Unless special measures are taken to mitigate demand, water supply and other technical risks, they create unattractive profit-loss ratios that make PPPs less attractive to lease or tonerossions. However, there are opportunities to enter into initial service contracts for specially trageted capital invariants and management contracts for operation and maintenance to restore failed systems before leasing or establishing concessions. Traditional project engineering/design, procurement and construction contracts and off- the-shell contracts (example for include joint operation and fringing over several years. Any PPP in this category noods financial support from the government and/or development pathers.
5 Private agro-indistrial companies are undertaking to build new magation systems or manage existing ones to expand or protect their value chains.	Peni's Diamond Project	Cotton textile clusters (and agro-industry in wheat and horticulture) under special PPP-type contracts with acceptable legal conditions that include relations with water user associations (WCA), non cluster farmers and other users (for example, villages) relying on the common water source, may be interesting for Water rights and service levels should be clearly defined for the cluster and other water consumers.
 Restoration of irrigated lands in very poor condition (for example, saline). 		There are two possible options: Provision of return contracts and government substitles in view of high cost recutivements. Ollin engineering/design procurement and construction of the project contracts and service or management arrangements until land productivity is restored.
Renewal of local irrigation systems transferred to water user associations	The experience and obligations of Turkey, Mexico and other countries show that mecessing the financial capacity of water consumer associations is effective in case where water consumers are transferred to associations.	The transfer of supply, rights and obligations in agricultural irrigation systems to WUA may have the same effect as the privatization (exprepriation) of local state irrigation facilities. There may be a need to change the legal states of WUA, for example, to convert them into farming cooperations.

- c. Restoration, exploitation, and return contracts are contracts that can be offered to restore the productivity of irrigated land that has fallen into a very poor condition (eg, salinity).
- d. Provision of recovery, exploitation and return contracts are needed to provide ancillary irrigation services (such as replacing pumps in main systems, solar-powered or small hydro pumping units;) or to deliver treated and treated wastewater to peri-urban agriculture.
- e. Transfer of state irrigation facilities to WUA in farms growing diversified crops.

To attract private partners, the above-mentioned opportunities should be identified and effective measures should be implemented.

- IV. Choosing a project and preparing it. As a result of the processes presented in sections I and II above, it is necessary to determine the current situations that can be offered to outsourcing and other types of PPPs in the irrigation sector of Uzbekistan, and to make decisions about the most suitable types of contracts for them. The next step is to identify and prepare specific projects in which private partners can be invited to participate.
 - V. Attracting potential private partners. The

"market" for irrigation PPPs is not large, and companies with sufficient experience, capacity, and especially the desire to invest in this specialized and risk-based asset class are relatively rare. Several planned PPPs have failed at the last stage due to insufficient interest from bidders.

The following constitute the target group of potential investors or partners for PPPs:

- > Consultants and service companies specializing in management and problem solving in: situations like those in Uzbekistan. Such firms should be prepared to implement a hands-on approach;
- > Agricultural/food processing companies willing to "re-integrate" into irrigation to secure their value chain. This includes cotton textiles and other "clusters".
- > There may also be larger agricultural and food processing companies willing to invest in new irrigation systems in a joint venture with the state.
- > Irrigation technology and equipment suppliers with system-wide experience under engineering/design, procurement and construction contracts or ready contracts (eg from Israel, Australia, India and elsewhere) are extended to include technical assistance, training and other support for several years after project completion.
- > Suppliers and operators of acceptable scale conventional and renewable electricity sources (including small hydro or solar power) operating on the basis of provision of recovery, exploitation and return contracts.
- > Provision of recovery, exploitation and return contracts for the treatment and recycling of wastewater to peri-urban rural irrigation systems for agricultural use (using biogas as a potential by-product).
- VI. Creating a favorable environment for PPPs in the field of irrigation. Supporting an enabling environment for PPPs has implications for many aspects of national government.

Conclusion and suggestions. Studying the above program based on the existing investment climate for PPPs in Uzbekistan and special reference to the following:

- Adapt existing legislation on PPPs to meet the needs of the irrigation sector, including developing regulatory and legal processes appropriate to the potential role of clusters.
- Establishment of Single Window Unit for PPPs in order to ensure effective implementation of legislation on PPPs.
- Develop templates for irrigation PPP contracts that can be adapted for specific situations.
- In order to maintain the confidence of investors, the general public and the end users of PPP services, PPP contracts are required to have an independent system of monitoring and regulation. Alternatively, both parties may apply to the court to resolve disputes arising from the performance of the terms of the contract. These provisions and jurisdictions are required to be part of the PPP agreement.
- Special relaxations of land ownership and land use rights may be required to cover PPPs involving the temporary lease or ownership of land or irrigation infrastructure, and may also affect the transfer of facilities to WUAs and other forms of full privatization.
- In order to provide certainty and certainty to PPP contractors involved in public surface irrigation, regulations regarding the withdrawal and use of seepage water may need to be revised.
- It is particularly important to prepare specific contract templates for irrigation PPPs that include the scope of the contract (eg, infrastructure boundaries, water

used for desalination, extent of drains) and ownership of the water it provides. Allocation of responsibilities for undertaking and mitigating individual risks should also be included as standard. In order to protect the position of "third-party" farmers who depend on the irrigation system, but do not sell products to the cluster, assuming that the cluster companies are among the target group of potential partners, the contract projects should also include clauses regarding the establishment of a close relationship between the cluster companies and the project organization.

- Clarification is required on the future development of rates and charges for Water Tax and Irrigation Services.
- Private contractors and investors should have access to suitable sources of financing for their enterprises. Local currency financing is required from either state or commercial banks (or both), while longer-term and larger loans from international development partners must be supported by the government providing the necessary guarantees. The state budget should provide for the allocation of the same amount of funds for the expenses of operation and maintenance and PPP contracting partners of the irrigation sector.

Ongoing agricultural policy reforms should be continued to promote market relationships that make irrigated agriculture more profitable and improve water productivity.

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