



Case studies for the Third session of the Working Party on Public-Private Partnerships*



- * The case studies aspire to be People-first PPP projects and are being published as received by the secretariat from the contributors



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Case 1
China
Water sector
Yuanmou PPP Irrigation Project



A Case Study of PPP Irrigation Project by DAYU Irrigation Group in China



Mr. Jiong Sun

Senior Vice President

Geneva, December 3, 2019



Project:	Yuan Mou High Efficiency Water-Saving Irrigation Project		
Country:	Peoples republic of China	Sector:	...
Dates of the project:	2016.7	Stage of the project:	Operate and Maintain

Description of the project

Install the smart water measurement devices, automatic control and information management system and on-farm drip irrigation systems in the YuanMou county for a total irrigated area of 7,600 ha.

Items	Number
Reservoirs	2
Water intakes	2
Main pipeline	189 km
Sub-main pipeline	266 km
Lateral pipelines	345 km
Distributed pipelines	242 km
Smart water measurement devices	5000 sets



The YuanMou County



Location: YuanMou county of Yunnan province in Southwest China (190km from Kunming city).

Climate: Dry hot valley climate (lows 15°C and highs 27°C).

Terrain: Mountainous area with valleys.



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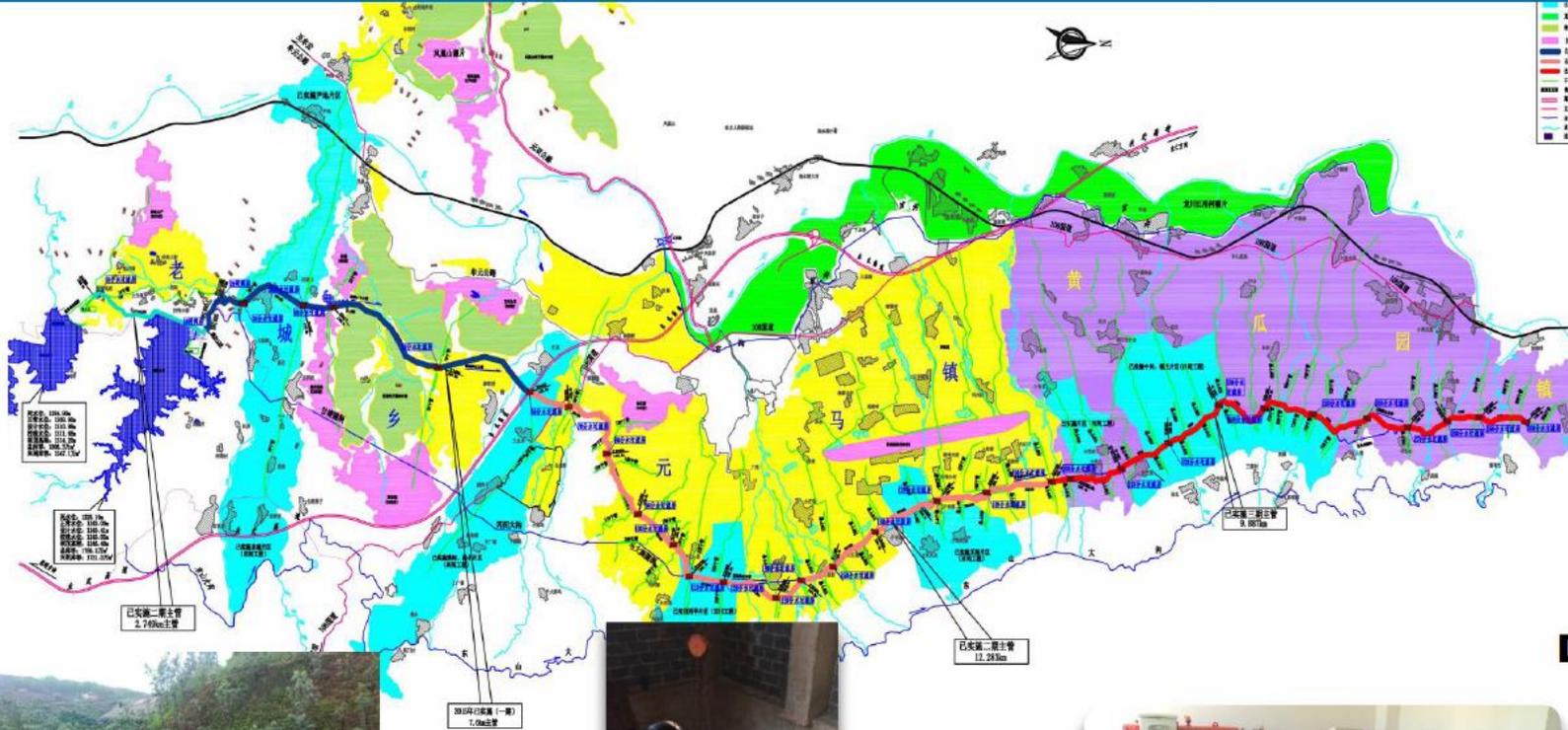


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The networks of YuanMou Efficient Water Saving Project



Reservoirs



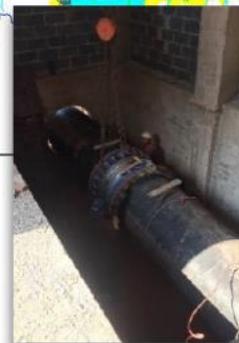
Fruit tomato



Main pipelines



Sub-Main pipelines



Diversion station



Drop irrigation system





Project:	Yuan Mou Efficiency Water-Saving Irrigation Project		
Country:	Peoples republic of China	Sector:	...
Dates of the project:	2016.7	Stage of the project:	Operate and Maintain

Compliance with UNECE People-first PPP criteria:

- The farmers in the project area mainly depend on agriculture for their livelihoods.
- Favorable temperature makes local farmland a natural greenhouse suitable to grow crops throughout the whole year.
- However, water is the main constraint for farmers growing crops year round since the annual average precipitation is only 616mm and the annual average evaporation is 3627 mm.
- This PPP project successfully solved the problems for developing irrigation project, in fund raising, optimal system design and construction, sustainable operation and maintenance by introducing new mechanisms.



Main mechanisms introduced in YuanMou PPP project

- 1. Jointly invested by Government, Dayu irrigation Group, Social capital and Local farmers;**
- 2. Integrated and comprehensive design, construction, operation and maintenance;**
- 3. Managed by specialized team with involvement of all stakeholders, including public, social capital, private and local farmers;**
- 4. Enhanced the participation of water users by involving in management, water users not only get benefit from irrigation but also get benefit from project operation;**
- 5. Encouraging water saving by introducing step water prices;**
- 6. Introducing water right and water trade mechanism;**
- 7. Extending service to farmers beyond water, such as fertigation and market information.**



Participation of stakeholders



Government



DaYu Irrigation Group



Local farmers



Beneficiary local community of YuanMou PPP Water-saving Project



Before construction of the project

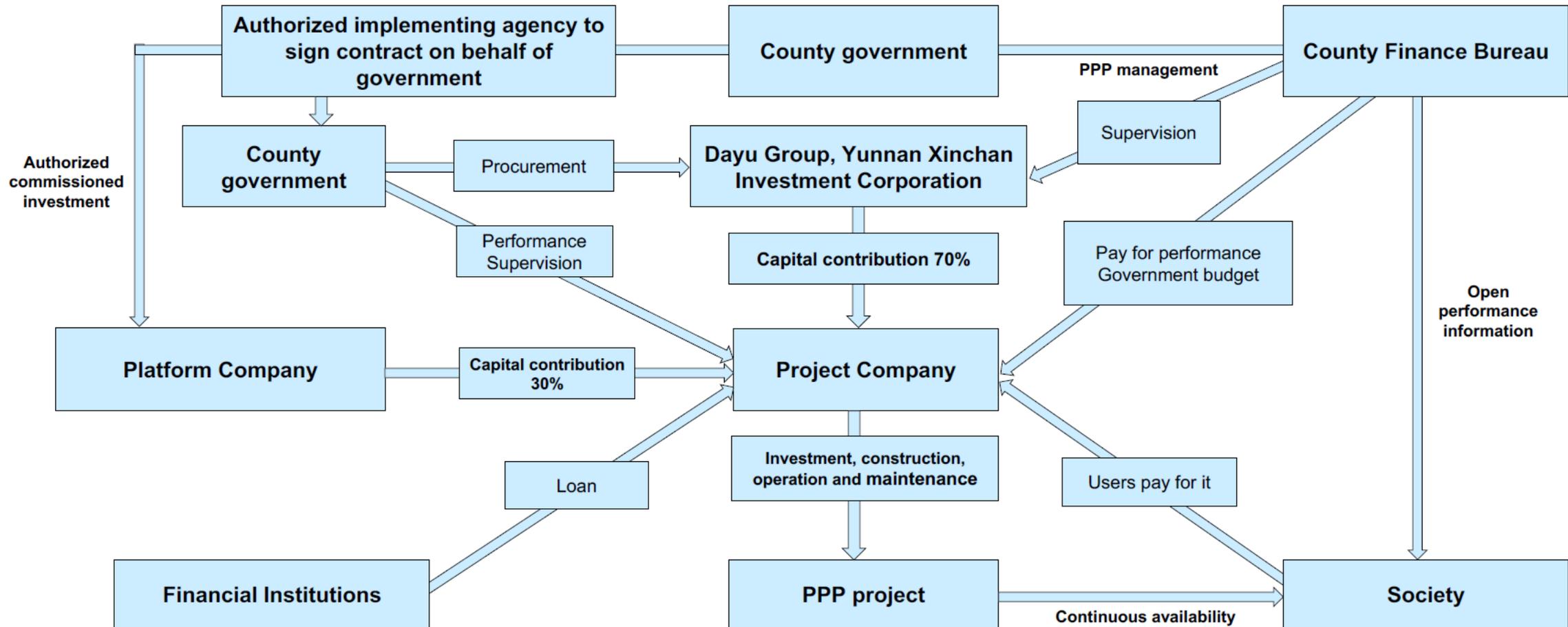


After construction of the project

Beneficiary	Number
Township	4
Village	110
Household	13,300
People	66,300



Project organization and management structure





YuanMou PPP Water-saving Project help farmers to grow High-value crops





Outcome 1: Increase access to essential services and lessen social inequality and injustice

- **Due to small land holdings and low economic return of conventional farming practice farmers are vulnerable in competition for water, and the water supply service to farmers is very low.**
- **Usually farmers couldn't get water on demand and grow high-value crops, and get good yields.**
- **This PPP project solves the above problems by integrated design, construction and management of the water-saving irrigation project.**
- **Farmers can receive water on demand for growing high-value cash crops.**
- **Equipped with smart water management system farmers in the project can get equal service.**
- **With the complete and advanced drip irrigation system the labor intensity for irrigation has been reduced significantly which is of importance for women and vulnerable farmers.**

Outcome 2: Enhance resilience and responsibility towards environmental sustainability

- **By using regulated reservoirs as water source, the project can guarantee the irrigation water demand in extreme dry season under climate change.**
- **By applying drip irrigation and fertigation technology, water saving is achieved and run off from farmland is also reduced, which not only increasing water using efficiency, but also reducing the losses of fertilizers and contributing an environment protection.**





Outcome 3: Improve economic effectiveness and sustainability

The project generates the following benefits:

- **With the operation of the project, in the project area cropping intensity has increased from 1 crop to 3 or 4 crops a year, and crop variety changed from conventional field crops to cash crops, as the result the gross revenue from farmland is increased from 2,1000 USD to 85,000 - 113,000 USD per ha.**
- **Due to the increase in agricultural production, the processing industry and transportation have developed dramatically, which increasing sustainable employment and local income.**
- **Due to scaling up of farm size and application of automation in the management of irrigation system, labor intensity for irrigation is reduced and more labor can shift from field to other sectors;**
- **More employment opportunity is generated for women labors in harvest of fruits and vegetables, processing industry and marketing products.**

Outcome 4: Promote replicability and the development of further projects

- Yuanmou water-saving project is the first PPP project in agricultural irrigation sector in China.
- With the successful operation of the project, it attracts many visitors from government departments, companies, institutions, related professionals.
- The project is serving as the training base for new developing model and reform in irrigation sector.
- Dayu Irrigation Group is building more PPP water-saving projects in Yun Nan Province, and the model will be applied in other provinces with favorable conditions.





Outcome 5: Fully involve all stakeholders in the projects

All stakeholders, including government sectors, financial institutions, irrigation companies, farmers, business sectors, etc. were involved in the design, construction and management of the project. All stakeholders directly took part in the PPP project and were directly affected by it. All of them have received benefits from the PPP project.

- Government achieving local social and economic development in sustainable way by increasing agricultural production, generating employment opportunity, saving water and reducing fertilizer application.**
- Financial institutes can get the expected investment return;**
- Irrigation company get economic return from the design, construction and operation of the project;**
- Farmers get benefit for increasing income, reduced labor intensity and better service;**
- Business sectors get more business opportunities in product processing industry and marketing.**



Conclusion

Yuanmou Water-saving Project is a successful replicable PPP project in irrigation sector.

Case 2
India
Transport sector
Mumbai metro



Project:	MUMBAI METRO ONE PVT, LTD : HOW FAR PEOPLE FIRST OBJECTIVES AS SET OUT BY UNECE INTERNATIONAL PPP CENTRE OF EXCELLENCE HAVE BEEN ACHIEVED		
Country:	India	Sector:	Urban Rail
Dates of the project:	December 2017	Stage of the project:	Operate. Maintain etc.

Description of the project:

Mumbai Metro is a successful PPP project operating in Mumbai, India. It has been procured, constructed and being operated following the norms as laid down by Government of India for such PPP projects.

Compliance with UNECE People-first PPP criteria:

The Project has impacted the accessibility, employment, safety, health and the surrounding real estate. The East West Connectivity between Ghatkopar and Versova, in Mumbai, has become at-least four times quicker and convenient. An endeavor has been made to analyse whether or not this project has been able to meet wholly/ partly 'People-First' PPP objectives as set out by UNECE.



Outcome 1: Increase access to essential services and lessen social inequality and injustice

The ridership has been constantly rising as more and more people prefer to take metro. A MMOPL official said, "At Ghatkopar, the per day ridership was 94,053 in February 2017, which is an increase of nearly 16% over the corresponding period last year. This shows that more and more commuters prefer to travel by the Metro". Many hitherto unconnected areas have also been connected. There is no reported incident against safety and health parameters and general public outlook is supportive of safe and healthy travel provided by MMOPL. It is thus appropriate to infer that objective of **Accessibility, Comfort, Safety and Healthy travel** is being achieved.

Outcome 2: Enhance resilience and responsibility towards environmental sustainability

Metro system reduces green house gas emissions. The localities where Metro Rail is running, invariably have better air quality and other environment issues are also well taken care of. The project is susceptible to climate change threats i.e. flooding but adequate mitigation measures have been incorporated.



Outcome 3: Improve economic effectiveness and sustainability

MMOPL is the city's first metro rail in Mumbai covering a distance of 11.4 km. This efficient, comfortable and quick urban transport system has boosted the west-east connectivity in the city. The housing and family support eco system prevalent in corridor has received a fillip in terms of reliability of connectivity, pollution reduction, decongestion of roads, comfort and safety of travel and enhanced accessibility. The real estate prices have not appreciably increased, infact there is hardly any increase. The reason appears to be the high base rates at the time of commissioning of Metro. Addition of Metro connectivity without associated increase in housing prices has improved affordability and livability of existing residential areas.

Outcome 4: Promote replicability and the development of further projects

Metro One Pvt. Ltd. is an example of successful running of Metro trains in India. From all angles it is a replicable project and it is nice to know that many metro projects in India are being developed through PPP route.

Outcome 5: Fully involve all stakeholders in the projects

MMOPL has been able to involve all stakeholders. The mobility options offered by MMOPL are not only safe, reliable and comfortable but also provide much needed choice in terms of time and scale of movement. The corporate structure and support through public funding makes it a perceptibly bankable project. The comparative ease with which the users can be controlled, facilitated and supported makes it a lesser burden for municipal and law enforcement authorities. It has created more jobs than those jobs which were lost due to running of metro on this route. In case of MMOPL the relocation of utilities and support services has proved to be a boon for locating and maintenance of such services and these are also a source of revenue for the Metro Project.

Case 3
Kazakhstan
Health sector
Hospital in the Kyzylorda region



Project:	Construction and Operation of regional multi-profile hospital in Kyzylorda region		
Country:	Kazakhstan	Sector:	Healthcare
Dates of the project:	2020-2037	Stage of the project:	Planning and Design

Description of the project:

The project envisages the construction and operation of a multi-profile clinical hospital providing a full cycle of medical care, as well as providing retraining of doctors on the basis of modern achievements of medical science.

The new multi-profile hospital will consist of a hospital with 300 beds. The construction of this project is justified by the current demand for inpatient medical services and high morbidity in the Kyzylorda region.

Compliance with UNECE People-first PPP criteria:

One of the main goals of the project is provision high quality services for cancer treatment, 130 bed out of 300 will be allocated for Cancer Center. The Kyzylorda region is recognized as a region of environmental disaster because of the disappearance of Aral Sea in XX century. It should be noted that, over the past 5 years, the incidence of cancer has increased by 15%.



Please showcase how the project actually implement the People-first approach and focuses on one or more of the five following People-first outcomes. Use the guiding questions to provide some examples and justification.

Outcome 1: Increase access to essential services and lessen social inequality and injustice

At present the services that are going to be transferred to new hospital, providing by City hospital and Cancer Treatment Center in Kyzylorda, where the deterioration of existing facilities above 90%, they were built in XX century by Soviet Union. Both on City hospital and Regional cancer center bed capacity 2.8 m² per bed, instead of 9.5 m², less than 3 times by the required standards. Additional, most of the population who suffer from cancer need to wait treatment in hospitals that located in capital – Nur-Sultan city or travel at their own expenses to South Korea and Israel, etc.

Outcome 2: Enhance resilience and responsibility towards environmental sustainability

Specifically the statistics shows that at present the rate of mortality 1.4 times higher than in other regions in Kazakhstan. Thus, the quality of services at an early stage of identification of cancer are highly needed. Under the project it is estimated that the main pressure will be given to the services rather than infrastructure. State representatives are ready to fully support private investor which has similar experiences.

Outcome 3: Promote replicability and the development of further projects

Within the framework of this project it is supposed to provide practical training for local workforces that were involved in works and services in City Hospital and Cancer Center.

Case 4
Kyrgyzstan
Health sector
Hemodialysis centers



Project:	Organization of hemodialysis services in cities of Bishkek, Osh and Jalal-Abad		
Country:	Kyrgyz Republic	Sector:	Health
Dates of the project:	2016-2019	Stage of the project:	Operation

Description of the project:

Reorganization of hemodialysis services in 6 public hemodialysis units - National Hospital, National Centre for Maternal and Child Health, National Centre for Cardiology and Therapy, Chui Oblast United Hospital, Osh Oblast United Hospital, Jalal-Abad Oblast United Hospital, and establishment of 4 hemodialysis centers by a private partner (2 in Bishkek, 1 in Osh, 1 in Jalal-Abad).

In accordance with the PPP Agreement between the Ministry of Health of the Kyrgyz Republic and Fresenius Medical Care Deutschland GmbH (Germany), this project aims to provide high-quality dialysis services to **283 patients with chronic renal disease (stage 5)**.

Compliance with UNECE People-first PPP criteria:

- Improve the efficiency of dialysis units and the quality of services provided;
- Improve the quality of life and satisfaction of patients receiving dialysis services;
- Coverage of patients living in remote regions;
- Professional development of specialists;
- Stimulation of transplantation and introduction of peritoneal dialysis

Location of dialysis centers in the Kyrgyz Republic





Project actually implements the People-first approach and focuses on five following People-first outcomes:

Outcome 1: Increase access to essential services and lessen social inequality and injustice

- 60.0% of the patients covered by the project are from socially and economically vulnerable groups;
- The project was officially launched in July 2019; however, it increased access to high-quality dialysis services for previously hemodialyzed patients in public health facilities;
- The project contributes to the elimination of social and economic inequalities, there is no infringement of patients' rights on gender

Outcome 2: Enhance resilience and responsibility towards environmental sustainability

- The facility's infrastructure is aimed at environmental sustainability by :
 - ❖ Reduction and improved management of medical waste
 - ❖ Reduced water and energy use - Using Fresenius Medical Care's 5008S hemodialysis unit reduces procedure costs by reducing water, concentrate and energy consumption by up to 30.0% (<http://medbuy.ru/gemodializnyj-apparat/fresenius-medical-care-5008s>)
 - ❖ Mandatory compliance with environmental standards during construction of facilities by a private partner
- The project is primarily aimed at improving the quality of services provided



Outcome 3: Improve economic effectiveness and sustainability

- The project is aimed at achieving an optimal ratio of price to quality and financial stability of a private partner;
- The project promotes decent and sustainable employment for the staff of the dialysis centres from among local specialists - doctors and nurses;
- Due to salary growth - Increased percentage of tax payments to the local budget;
- The project takes into account the differentiated needs of women and men;
- There are certain improvements in the operational efficiency of dialysis services for the population of the country.

Outcome 4: Promote replicability and the development of further projects

- There is a room for replication and scaling up;
- The project acted as a trigger for capacity development and increased competition among local operators in the dialysis market;
- The immediate plans of the private partner include the establishment of a Dialysis Training and Resource Centre

Outcome 5: Fully involve all stakeholders in the projects

- Stakeholders - directly involved in the PPP project - in terms of selection, development and impact of the project - German Development Bank (KfW), International Finance Corporation (IFC), Government of the Kyrgyz Republic, Ministry of Economy of the Kyrgyz Republic, Ministry of Finance of the Kyrgyz Republic, other ministries and departments of the Kyrgyz Republic, as well as Integrated Specialized Groups - Association of Hemodialysis Patients of the Kyrgyz Republic;
- The project is aimed at protecting the interests of patients receiving chronic dialysis services

Case 5
Philippines
Education
PPP for School Infrastructure Project

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Project:	PPP for School Infrastructure Project (PSIP) Phase I		
Country:	Philippines	Sector:	Social - Education
Dates of the project:	October 8, 2012 – Contract Signing February 4, 2013 – Construction Start Date December 4, 2015 – 100% Completion	Stage of the project:	Ongoing Lease Period; Ongoing first Periodic Maintenance Works

Description of the project:

The project involves the design, finance, construction and maintenance of 9,296 one-storey and two-storey classrooms, including furniture and fixtures, in various sites in Regions I, III and IV-A of the Philippines, with a 10-year lease period under a Build-Lease-and-Transfer (BLT) scheme. This is the first phase of the project which aims to supplement the program of the Department of Education in reducing classroom backlog. The Project is divided into three packages, Package A for Region I, Package B for Region III and Package C for Region IV-A.

Compliance with UNECE People-first PPP criteria:

In 2010, to address the classroom shortage as well as the public school system's incremental classroom requirements, the Department of Education has adopted the PPP framework as a strategy to supplement the provision of educational facilities in the Philippine public school system. The PPP framework aimed to harness the private sector resources and technical expertise in order to (1) fast-track the construction and delivery of classrooms; (2) reduce cost for government; and (3) introduce innovation in design, construction methods, and new materials. As a result, the PSIP Phase I has provided social benefits to students in terms of better environment conducive for learning and new school facilities.





Compliance with UNECE People-first PPP criteria:

Outcome 1: Increase access to essential services and lessen social inequality and injustice

- Expected to benefit an estimate of **418,320** students per school year in Regions I, III, and IV-A for the next five years
- Contributed in improving the classroom-student ratio for elementary and high school, from School Year (SY) 2011-2012 to SY 2016-

2017:

	SY 2011-2012	SY 2016-2017
Elementary	1:40	1:35
High School	1:53	1:43

- Included the delivery of sanitation facilities and classroom furniture and fixtures together with the constructed school buildings, as compared to traditional procurement where these are procured separately
- Accessibility for persons with disability were considered during the design and construction of school buildings, following the Magna Carta for Disabled Persons and Accessibility Law

Outcome 2: Enhance resilience and responsibility towards environmental sustainability

- The Minimum Performance Standards and Specifications of the project included requirements to ensure the safety and reliability of the school building in each location such as earthquake design considerations, wind design against typhoon, fire protection, resistance to termites, air movement, noise level limits, among others



Compliance with UNECE People-first PPP criteria:

Outcome 3: Improve economic effectiveness and sustainability

- Cost-effectiveness on the part of the government due to faster construction of school buildings and provision of furniture and fixtures and periodic maintenance works, as compared to traditional procurement
- Inclusion of defects liability period after construction and warranty clause during the lease period in order to ensure the structural integrity of the school buildings
- Provision of two (2) periodic maintenance works to be undertaken by the project proponent within the 10-year lease period to rectify structural defects, conduct termite control, repaint the exterior and interior parts of the walls, among others
- The project generated local employment by providing over 11,000 jobs, which includes 139 partner subcontractors and 91 local suppliers during its construction period
- Costs of the transfer of the project to DepEd shall be solely borne by the project proponent

Outcome 4: Promote replicability and the development of further projects

- After the successful award of PSIP Phase 1, DepEd implemented Phase 2 of the project in 2013, for the design, finance, and construction of 4,365 classrooms, including furniture, fixtures, and toilets in 1,895 public schools in 6 regions
- Lessons learned during the implementation of PSIP Phase 1 are being documented for potential replication to future PSIP projects



Compliance with UNECE People-first PPP criteria:

Outcome 5: Fully involve all stakeholders in the projects

- **Department of Education (DepEd)**
 - Identifies specific regions and schools with classroom backlog that shall be covered by the project
 - Provides the Project Proponent access to the project sites
 - Monitors the implementation of the project and conducts coordination meetings with other government/non-government organizations that may be affected by the project
- **School Principals**
 - Give advice in the determination of the location and classroom requirement of their schools
 - Provide assistance in monitoring the construction and delivery of the school buildings, furniture and fixtures
 - Helps ensure the conduct of periodic maintenance works properly addresses the maintenance needs of the school buildings
- **Local Government Units (LGUs)**
 - Provide support to DepEd in securing relevant permits and consents
 - Allow the construction of school buildings on its owned land for the benefit of schools covered by the project



Compliance with UNECE People-first PPP criteria:

Outcome 5: Fully involve all stakeholders in the projects

- **Project Proponents**
 - Finance, design, and construct the classrooms
 - Ensure compliance with the Minimum Performance Standards and Specifications (MPSS) stipulated in the PPP contract
 - Conduct periodic maintenance works
- **Independent Consultant**
 - Provides assistance to DepEd and the Project Proponent through supervision and monitoring of the project
 - Reviews the detail engineering design, and evaluates the constructed of school buildings if it is in accordance with the MPSS
 - Resolves technical issues that affect the project implementation
- **Public-Private Partnership Center of the Philippines**
 - Provides assistance to DepEd during the development and procurement of the project
 - Assists DepEd in monitoring project implementation and resolving project issues and bottlenecks

Case 6

Tajikistan

Transport sector

Electronic payment and control system for public transport in the city of Dushanbe



Project:	“System of electronic payment and control of travel in public passenger transport of the city of Dushanbe”		
Country:	Tajikistan	Sector:	Transport
Dates of the project:	1 march 2018	Stage of the project:	Planning, Design, Build, Operate, Maintain etc.

Description of the project:

It should be noted that the project “System of electronic payment and control of travel in public passenger transport of the city of Dushanbe” is the latest project for the public transport sector in the Republic of Tajikistan, and its software has been fully developed by domestic experts. This project will contribute to the development of priority areas of the country in the use of innovative technologies.

Compliance with UNECE People-first PPP criteria:

This system is aimed at simplifying the process of payment for passengers on public transport, as well as implementation of a number of advantages, such as the settlement of transport enterprises, solution of the problem of return of passengers, regular financial control, as a whole, improving the level and quality of transport services, regulating and controlling the circulation of vehicles and other.



Outcome 1: Increase access to essential services and lessen social inequality and injustice

For example:

- Did the project consider the needs of the socially and economically vulnerable? **Yes, in the implementation of project economic and social development is fully planned.**
- Did the project increase access to essential services to the previously underserved? **Yes, the level and quality of services provided to the residents and guests of the capital has improved significantly with the help of electronic means of payment process and control over previous years.**
- Does the project contribute to eliminating socioeconomic inequalities and gender inequalities?

Outcome 2: Enhance resilience and responsibility towards environmental sustainability

For example:

- Does the infrastructure or facility improve environmental sustainability: By cutting greenhouse gas emissions? Reducing loss or waste? Decreasing the use of water and energy? Were the facilities built respecting environmental standards? **Yes, the project will supported and improving of urban transport infrastructure with the using of modern technology.**
- Is the facility resilient against climate change threats? **Yes, all installed technology compliance to modern and international requirements**
- Is there an increase in the quality of the service provided? **The process of the implementation of project servicing public transportation step by step is improving**



Outcome 3: Improve economic effectiveness and sustainability

For example:

- Does the project achieve value for money and fiscal sustainability? **Yes**
- Does the projects promote local decent and sustainable employment? annual growth of local income? **Yes**
- Does it advance women's economic empowerment or take into account the differentiated needs of women and men?
- Does the project empower local business communities, economically marginalized communities, vulnerable groups?
- Is there an improvement in operational efficiency? Does it reduce costs?

Outcome 4: Promote replicability and the development of further projects

For example:

- Can the project be repeated and/or scaled up? **Yes, the project can be repeated in other cities**
- Did the project build capacities of the local staff and the governments to deliver similar projects? **Yes, The automated fare control system (ASCOP) is the most effective way to increase revenue collection and reduce the number of stowaways by fully automating the processes of selling travel documents, collecting and recording revenue, as well as passenger travel control.**
- Did it provide training to local workforces for the transfer of skills? **Yes**

Outcome 5: Fully involve all stakeholders in the projects

For example:

- Were all stakeholders -directly involved in the PPP project or directly or indirectly affected by it- consulted on the selection, design and impact of the project? Did special groups who have played a limited role to date were integrated as well? **Yes**
- Were the interests of affected communities protected? **Yes, in the agreement reached**

Case 7

Ukraine

Education sector

University Campus in the smart and sustainable city of Vilne

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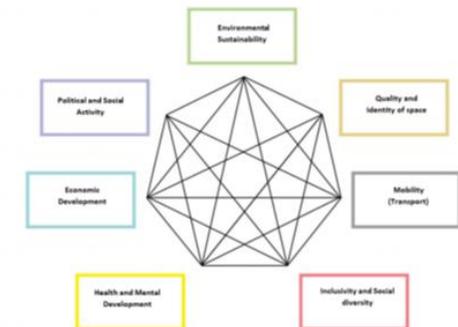
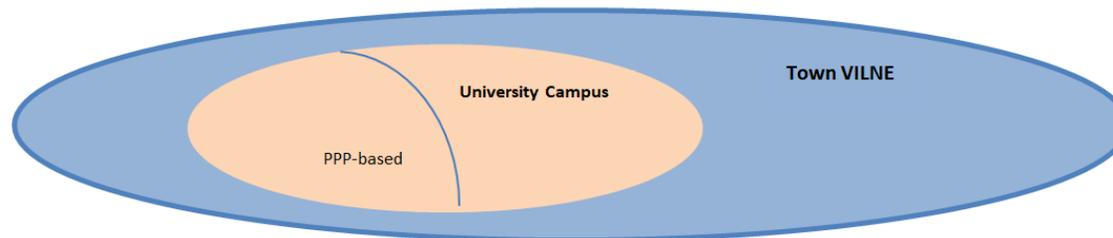
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Project:	University Campus in the smart and sustainable city of Vilne		
Country:	Ukraine	Sector:	Education
Dates of the project:	2020 - 2040	Stage of the project:	Planning & Design

Description of the Project:

The Project involves the construction of an innovative **University Campus** as a part of the creation of a new sustainable city of Vilne, located between Kyiv and the village of Bilogorodka. Both the city and the Campus will be built based on a the new approach to the organization of urban and educational spaces in the context of **SDG 11, 4, 8, 9** objectives. The core of the University Campus and the initiator of its creation is **Taurida National University named after Volodymyr Vernadsky (TNU)**. It consists of: Institute of Management of Economics and Environmental Management, Institute of Municipal Management and City Economy, Humanitarian Institute, Institute of Philology and Journalism, Academy of Arts named after Sergiy Prokofiev, that will create a multifunctional educational space for the training of specialists of a wide profile. A part of the University Campus will be created on PPP basis (26.3 out of 45.1 hectares). PPP project implementation will allow the TNU to increase the number of students from 6,000 (3-nd year after the start of the Project) to 18,000 (in the 8-th year of the Project), provide students with dormitories, and teachers – with accommodation. The second part of the Campus will be created by a private partner together with leading high-tech companies operating in Ukraine, starting from 8 to 11 years from the start of the PPP Project. After the construction of the entire University Campus is completed, representatives of private business and TNU will create an Educational and Scientific-Production Complex, which will become a center for inclusive and equitable quality education, including lifelong learning opportunities, scientific innovative researches & upgrading the technological capabilities, as well as a place for education for sustainable development and sustainable lifestyle.

<http://vilne.madein.ua>





Compliance with UNECE People-first PPP criteria:

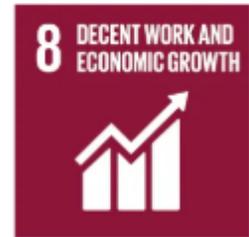
This Project in the first turn is oriented on the people wellbeing. Its goals are closely correlated with all the People-first outcomes and the UN SDGs 4, 8, 9, 11:

Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. The Project provides building the education facilities that are disability and gender sensitive and located in safe, inclusive and innovative environment. Its implementation will increase the number of youth and adults who have relevant skills for employment, decent jobs and entrepreneurship. It will promote sustainable development through education for sustainable development and sustainable lifestyle.

Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. As the result of this Project implementation the favorable conditions for achieving full and productive employment and decent work for all women and men, including for young people and persons with disabilities, will be created.

Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. In the framework of the Project implementation the enhancing the scientific innovative researches & upgrading the technological capabilities will be achieved, the number of researchers and development workers will increase.

Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable. University Campus will be created in the new smart and sustainable city of Vilne located close to Kyiv city and near the Village Belgorodka. Development of this Project will support positive economic, social and environmental links between urban, per-urban and rural areas in the context of the administrative reform in Ukraine. As a result of the Project implementation all citizens of the Campus and the new city will have access to adequate, safe and affordable housing and basic services. They will also have safe, affordable, accessible and sustainable transport systems, favorable environment, and universal access to safe, inclusive and accessible, green and public spaces.



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Outcome 1: Increase access to essential services and lessen social inequality and injustice

The Project provides for the creation of a modern innovation structure for educational activities and scientific researches based on the combination of interests of high-tech companies, science, education, business and the state in order to implement innovative projects. The core of this structure will be the national mono-profile university.

Introducing up-to-date approaches to youth education and lifelong learning opportunities for people who have lost their jobs will enable them to acquire relevant skills for employment, decent jobs and entrepreneurship in Ukraine.



Outcome 2: Enhance resilience and responsibility towards environmental sustainability

All buildings in the new town including University Campus will have the energy efficiency class "A +++", the town light system will use LEDs, Bream & other equipment with classification not lower than Gold. The city will introduce a citywide system for separate collection of household waste. All these measures will provide optimal use of energy and water, minimize greenhouse gas emissions and guarantee of environmental sustainability of the Project.

The modular principle of low-floor development with the formation of a green zone and public space for recreational purposes with the possibility of temporary or permanent overlap between buildings (atrium).

Public Spaces of the Campus - 65% of its territory.

People will have more comfortable conditions for living and working than now and pay less for the services provided.





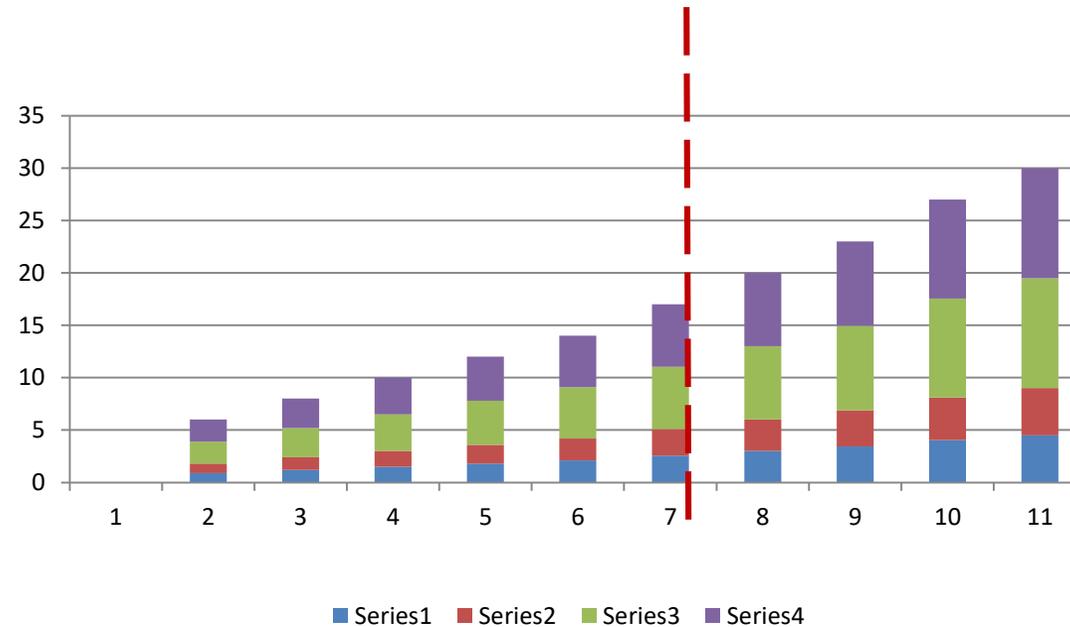
Outcome 3: Improve economic effectiveness and sustainability

PPP project (from 6000 to 18000 students)

Total investments, <i>mln USD</i>	147.7
Construction period, <i>years</i>	7
Area of the 1-st part of the Campus, <i>hectares</i>	26.3
Duration of PPP agreement, <i>years</i>	up to 20
Discounted payback period (DPP), <i>years</i>	10.94
Net present value (NPV), <i>thousand USD for 15, years</i>	31928
Profitability index (PI), <i>for 15 years</i>	1.319
Internal rate of return (IRR), %	19.4

2-nd stage of the Campus (from 18000 to 30000 students)

Total investments, <i>mln USD</i>	98.4
Construction period, <i>years</i>	4
Area of the 1-st part of the Campus, <i>hectares</i>	18.8



The Project will create conditions for young Ukrainian people to have decent and sustainable employment & opportunities for people who have lost their jobs in the new economic conditions, develop export of educational services.

The new approach to the urban planning will allow taking in account the differentiated needs of women and men, as well as the disabled people.

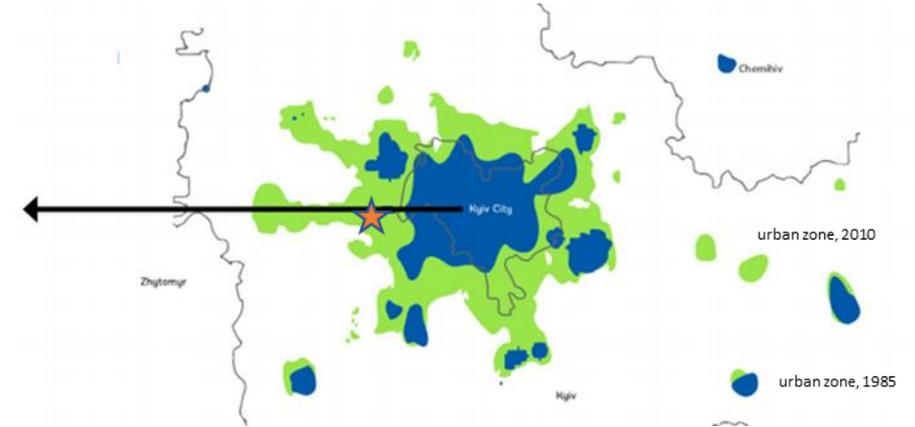
Utilization of new environmentally friendly and energy efficiency technologies will provide operational efficiency of the Project and high quality life conditions for people



Outcome 4: Promote replicability and the development of further projects

The Project has a great potential to be repeated in the framework of the administrative reform in Ukraine and during the process of establishing an urban agglomeration near Kyiv.

The Project implementation will increase capacities of local authorities in urban development based on knowledge received in the Institute of Municipal Management and City Economy (part of TNU).



Outcome 5: Fully involve stakeholders in the projects

- Ministry of Education and Science of Ukraine
- National Academy of Science of Ukraine, Academy of Pedagogical Sciences of Ukraine
- Taurida National University named after Volodymyr Vernadsky (TNU)
- Kyiv State Regional Administration (Agency of Regional Development will be located in the Campus), Bilgorodka village local council
- Ukrainian Union of Industrialists and Entrepreneurs
- Bilgrad Ltd.
- Ukrainian PPP Center,
- PPP Academy, PPP Consulting

