



China: Liaoning Safe and Sustainable Urban Water Supply Project (P158713)

EAST ASIA AND PACIFIC | China | Water Global Practice |
IBRD/IDA | Investment Project Financing | FY 2018 | Seq No: 6 | ARCHIVED on 20-Nov-2020 | ISR44123 |

Implementing Agencies: Liaoning Urban Construction and Renewal Project Management Company Limited (LUCRPMC), PEOPLE'S REPUBLIC OF CHINA

Key Dates**Key Project Dates**

Bank Approval Date: 06-Jun-2018

Effectiveness Date: 23-Oct-2018

Planned Mid Term Review Date: 22-Feb-2021

Actual Mid-Term Review Date:

Original Closing Date: 30-Jun-2023

Revised Closing Date: 30-Jun-2023

Project Development Objectives

Project Development Objective (from Project Appraisal Document)

The project development objectives are to improve water quality and operational efficiency of selected water supply utilities in the project areas.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

Components Table

Name
Component 1: Water supply service infrastructure improvement:(Cost \$287.14 M)
Component 2: Water supply service management improvement:(Cost \$57.08 M)
Component 3: Project Implementation support and institutional strengthening:(Cost \$16.94 M)

Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	<input type="checkbox"/> Moderately Satisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Implementation Progress (IP)	<input type="checkbox"/> Moderately Satisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Risk Rating	<input type="checkbox"/> Substantial	<input type="checkbox"/> Substantial

Implementation Status and Key Decisions

Further progress has been achieved in project implementation in spite of the COVID-19 pandemic impacts. All the contracts financed by the counterpart funds are reportedly completed. Most of the equipment and goods had been delivered in different water supply companies (WSC). Significant progress has been made in implementing various plans development, non-revenue water (NRW) reduction plan, energy efficiency improvement plan, financial improvement plan, and WSC performance benchmarking as well as institutional strengthening. The first smart water system (SWS) development is underway in Gaizhou WSC and the District Metered Areas (DMA) & Narrowband – Internet of Things (NB-IoT) Smart Meter Pilot in Fushun WSC has yielded very encouraging results and the experiences are being replicated within the service area. The WSCs enjoy a high customer satisfaction rate for their water supply services. The project implementation progress and loan disbursement are behind schedule but expected to improve significantly in the coming months.



This project implementation is reaching the mid point by early 2021. The mid-term review for the project is scheduled to take place in late February, 2021.

Risks

Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	Low	Low	Low
Macroeconomic	Low	Low	Low
Sector Strategies and Policies	Low	Low	Low
Technical Design of Project or Program	Moderate	Moderate	Moderate
Institutional Capacity for Implementation and Sustainability	Moderate	Substantial	Substantial
Fiduciary	Moderate	Moderate	Moderate
Environment and Social	Moderate	Moderate	Moderate
Stakeholders	Moderate	Moderate	Moderate
Other	Low	Substantial	Substantial
Overall	Moderate	Substantial	Substantial

Results

PDO Indicators by Objectives / Outcomes

Direct project beneficiaries				
▶ Direct project beneficiaries (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	399,081.00	580,716.00	5,690,600.00
Date	27-Jun-2017	28-Feb-2020	31-Aug-2020	30-Jun-2023
Comments:	With the completion of some Bank loan supported contracts and NBF contracts, the direct project beneficiaries have reached to 228,280 in Shenyang, 105,000 in Anshan, 212,739 in Fushun, 30,515 in Fuxin and 4,182 in Gaizhou. The total direct project beneficiaries have reached to 580,716.			
▶ Female beneficiaries (Percentage, Custom)				



	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	49.00	49.00	49.00
Date	27-Jun-2017	28-Feb-2020	31-Aug-2020	30-Jun-2023
Comments:	Supplemental to the Direct Project Beneficiaries Indicator			

Compliance with water quality Health Standards				
► Compliance with water quality Health Standards (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	Shenyang: 33% Fushun:33% Anshan:33% Fuxin:33% Gaizhou:33% Weighted Average: 33.04%	Shenyang:100% Fushun:100% Anshan:100% Fuxin:100% Gaizhou:30.19% Weighted Average:86%	Shenyang:100% Fushun:37.74% Anshan:100% Fuxin:32.07% Gaizhou:30.19% Weighted Average:60%	Shenyang:100% Fushun:100% Anshan:100% Fuxin:100% Gaizhou:100% Weighted Average:100%
Date	28-Jun-2017	28-Feb-2020	31-Aug-2020	30-Jun-2023
Comments:	Note: The labs in Fushun, Fuxin and Gaizhou WSCs are not capable to monitor 106 water quality parameters yet. In the previous M&E results, the indicator results of Fushun and Fuxin had reached 100 percent, as these two WSCs sent their water samples to provincial lab to test 106 water quality parameters and reached all the standards. However, in this M&E results, Fushun and Fuxin WSCs have not sent their water samples to provincial labs yet. Therefore, the indicator results of Fushun is 37.74 percent, indicating that Fushun WSC only used its own lab to test 40 water quality parameters. And the indicator results of Fuxin is 32.07 percent, indicating that Fuxin WSC only used its own lab to test 34 water quality parameters.			

Non-Revenue-Water in each project city				
► Non-Revenue-Water in each project city (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	Shenyang:33.0% Fushun:38.8% Anshan:30.9% Fuxin:25.7% Gaizhou:64.1%	Shenyang:33.29% Fushun:39.10% Anshan:30.25% Fuxin:23.8% Gaizhou:63.45%	Shenyang:33.62% Fushun:39.95% Anshan:25.69% Fuxin:21.23% Gaizhou:66.7%	Shenyang:29.8% Fushun:22.1% Anshan:24.0% Fuxin:16.2% Gaizhou:35.1%
Date	27-Jun-2017	28-Feb-2020	31-Aug-2020	30-Jun-2023
Comments:	Comparing to the results reported in the last ISR, the slight increases of non revenue water (NRW) in Shenyang, Fushun and Gaizhou WSCs were mainly due to the impacts of the COVID-19, as some areas have stopped in-house water meter reading and water fee collection, and the water supply and water selling were decreased. The NRW in Anshan and Fuxin have decreased slightly, because these two WSCs have gradually resumed water meter reading and water fee collection.			

Energy consumption by the water utilities in each project city



►Energy consumption by the water utilities in each project city (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	Weighted Average:0.61 kwh/m3 Shenyang:0.58 Fushun:0.60 Anshan:0.46 Fuxin:0.96 Gaizhou:1.11	Weighted Average:0.82 kwh/m3 Shenyang:0.54 Fushun:0.542 Anshan:0.452 Fuxin:0.9 Gaizhou:1.58	Weighted Average:0.82 kwh/m3 Shenyang:0.56 Fushun:0.553 Anshan:0.399 Fuxin:0.9 Gaizhou:1.86	Weighted Average: 0.51 kwh/m3 Shenyang:0.47 Fushun:0.51 Anshan:0.45 Fuxin:0.84 Gaizhou:0.36
Date	27-Jun-2017	28-Feb-2020	31-Aug-2020	30-Jun-2023
Comments:	Average energy consumption per m3 (kwh/m3) of water sold (billed) of each water company. Note: the increasing of energy consumption in some WSCs was also due to the impact of the COVID-19 and the reduction of water supply and water selling.			

Intermediate Results Indicators by Components

Water supply service infrastructure improvement				
►Length of new or rehabilitated main pipelines for water supply (Kilometers, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	26.05	52.77	300.00
Date	27-Jun-2017	28-Feb-2020	31-Aug-2020	30-Jun-2023
►Number of secondary booster pumps installed or rehabilitated (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	37.00	38.00	270.00
Date	27-Jun-2017	28-Feb-2020	31-Aug-2020	30-Jun-2023
►Number of district water meters installed (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	103.00	335.00	945.00
Date	27-Jun-2017	28-Feb-2020	31-Aug-2020	30-Jun-2023
►Number of water meters installed (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	19,378.00	51,148.00	115,000.00



Date	27-Jun-2017	28-Feb-2020	31-Aug-2020	30-Jun-2023
Water supply service management improvement				
▶ Working Ratio (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	Shenyang:0.85 Fushun:0.95 Anshan:1.02 Fuxin:0.88 Gaizhou:1.30	Shenyang:0.85 Fushun:0.9675 Anshan:1 Fuxin:0.90 Gaizhou:1.15	Shenyang:0.86 Fushun:0.9553 Anshan:0.97 Fuxin:0.90 Gaizhou:1.25	Shenyang:0.80 Fushun:0.85 Anshan:0.90 Fuxin:0.85 Gaizhou:0.95
Date	27-Jun-2017	28-Feb-2020	31-Aug-2020	30-Jun-2023
Comments:	Note: The work ratio of Gaizhou WSC has increased. Gaizhou WSC has just installed/replaced a large number of water meters in residential communities. However, in these areas, Gaizhou WSC has not started/resumed water fee collection yet.			
▶ Customer satisfaction with the quality of water supply services (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	65.00	86.31	86.31	75.00
Date	27-Jun-2017	28-Feb-2020	28-Feb-2020	30-Jun-2023
▶ Percentage of women satisfied with the quality of water supply services (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	65.00	86.84	86.84	75.00
Date	27-Jun-2017	28-Feb-2020	28-Feb-2020	30-Jun-2023
Comments:	Supplemental to customer satisfaction with the quality of water supply services			
▶ Number of cities that have hydraulic network models with 24 hours' simulation capability (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	1.00	1.00	1.00	3.00
Date	27-Jun-2017	28-Feb-2020	31-Aug-2020	30-Jun-2023
▶ Number of cities that have computerized Asset Management systems (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	4.00	0.00	5.00



Date	27-Jun-2017	28-Feb-2020	31-Aug-2020	30-Jun-2023
Comments:	Note: In the previous ISR, this indicator was reported as four cities with computerized asset management systems. However, these existing management systems were not developed under this project. Therefore, in this ISR, the indicator result was revised to zero. Under this project, all WSCs are developing new asset management systems or improving their existing systems. These activities are still in progress.			
► Number of implementation ready PPP transactions prepared under the project (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	2.00
Date	31-Aug-2018	28-Feb-2020	31-Aug-2020	30-Jun-2023

Project implementation support and institutional strengthening				
► Number of water utility staff received training on asset management systems, water quality monitoring, and pipe leakage detection and repairing (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	485.00	2,054.00	754.00
Date	27-Jun-2017	28-Feb-2020	31-Aug-2020	30-Jun-2023
► Number of Female Staff received training on asset management systems, water quality monitoring, and pipe leakage (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	178.00	815.00	300.00
Date	27-Jun-2017	28-Feb-2020	31-Aug-2020	30-Jun-2023
Comments:	Supplemental to Number of water utility staff received training on asset management systems, water quality monitoring, and pipe leakage detection and repairing indicator			
► Grievances responded and/or resolved within the stipulated service standards for response times (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	Shenyang:99% Fushun:99% Anshan:99% Fuxin:99% Gaizhou:99%	Shenyang:82.39% Fushun:90.12% Anshan:86.18% Fuxin:86.27% Gaizhou:62.92%	Shenyang:82.39% Fushun:90.12% Anshan:86.18% Fuxin:86.27% Gaizhou:62.92%	Shenyang:99% Fushun:99% Anshan:99% Fuxin:99% Gaizhou:99%
Date	27-Jun-2017	28-Feb-2020	28-Feb-2020	30-Jun-2023

Performance-Based Conditions



Data on Financial Performance

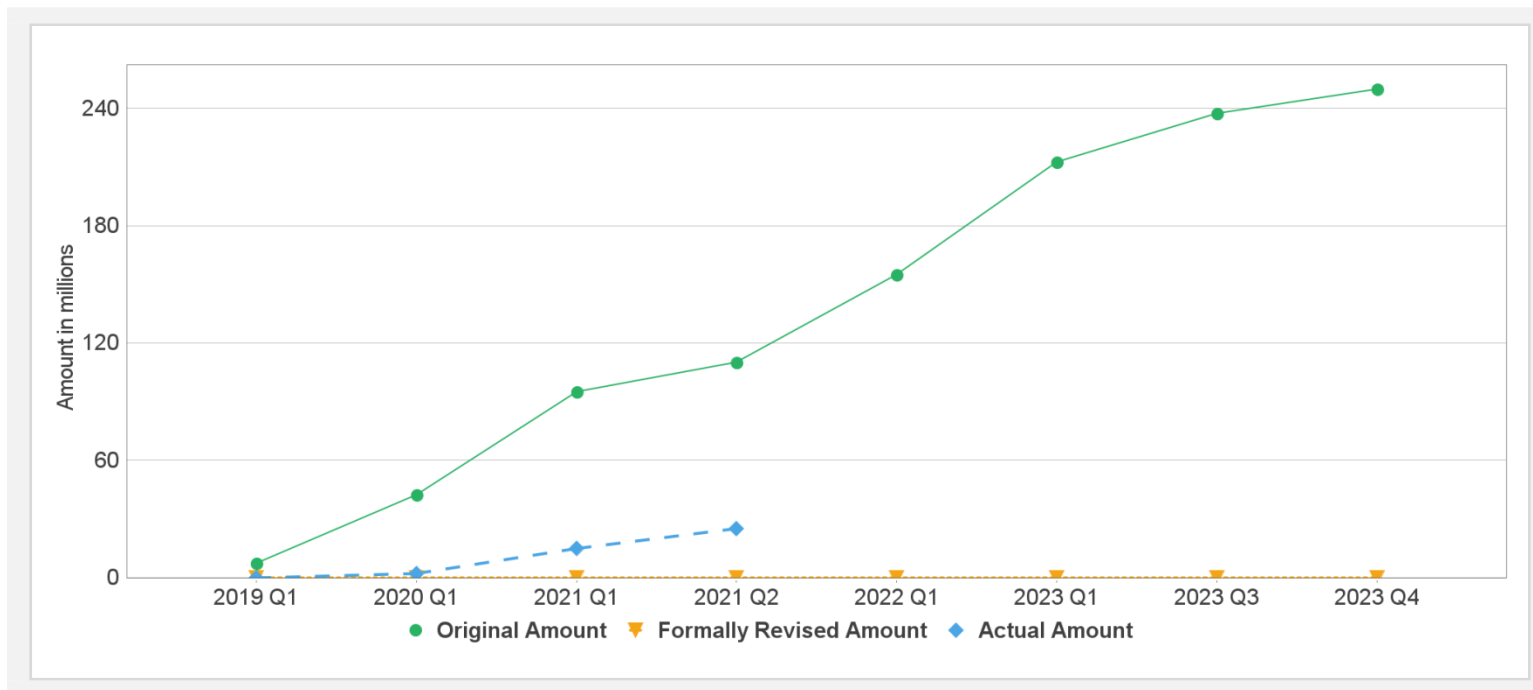
Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P158713	IBRD-88370	Effective	USD	250.00	250.00	0.00	25.63	224.38	10%

Key Dates (by loan)

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P158713	IBRD-88370	Effective	06-Jun-2018	06-Aug-2018	23-Oct-2018	30-Jun-2023	30-Jun-2023

Cumulative Disbursements



PBC Disbursement

PBC ID	PBC Type	Description	Coc	PBC Amount	Achievement Status	Disbursed amount in Coc	Disbursement % for PBC
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Restructuring History

There has been no restructuring to date.

Related Project(s)

There are no related projects.
