

China : Henan Flood Emergency Rehabilitation and Recovery Project

1. Project Information

Project ID:	P000543	Instrument ID:	L0543A
Member:	China	Region:	Eastern Asia
Sector:	Water	Sub-sector:	Water disaster resilience
Instrument type:	<input checked="" type="checkbox"/> Loan:865.00 Euro million <input type="checkbox"/> Guarantee	Lead Co-financier(s):	
ES category:	A	Borrowing Entity:	Ministry of Finance, China
Implementing Entity:	People's Government of Henan Province		
Project Team Leader:	Guoping Zhang		
Responsible DG:	Gregory Liu		
Responsible Department:	INF2		
Project Team Members:	<p>Nat Pinnoi, Economist; Siyang Wang, Team Member; Liu Yang, Project Counsel; Yunlong Liu, OSD - Procurement Specialist; Yi Geng, OSD - Financial Management Specialist; Susrutha Goonasekera, OSD - Social Development Specialist; Chongwu Sun, OSD - Environment Specialist; Bo Shi, OSD - Procurement Specialist; Jingjing Zhao, Back-up PTL; Yanyang Shi, Project admin</p>		
Completed Site Visits by AIIB:	<p>Aug, 2022 project launch mission to support the project implementation in all aspects including technical, financial management, environmental and social management, procurement among others</p> <p>Feb, 2023 In-person monitoring mission to site projects in Henan Province. Review of procurement, environmental, social and implementation aspects of the Project.</p> <p>Jun, 2023 Project mid-term review mission to support and review the project implementation in all aspects including technical, financial management, environmental and social management, procurement among others; and to discuss with Henan PPMO and three Municipal PMOs about potential changes of project activities to utilize the cost savings as per the governments' demand.</p>		
Planned Site Visits by AIIB:	<p>Nov, 2023 Late November or early December 2023</p>		
Current Red Flags Assigned:	0		
Current Monitoring Regime:	Regular Monitoring		
Previous Red Flags Assigned:	0		
Previous Red Flags Assigned Date:	2023/02		

2. Project Summary and Objectives

This project is an emergency operation in response to the urgent need of the Government of Henan Province for post-flood disaster recovery and reconstruction. The project supports the post-disaster rehabilitation and recovery in the municipalities of Zhengzhou, Xinxiang and Jiaozuo of Henan Province, and to strengthen the capacity of the three municipalities in integrated flood disaster risk management and flood emergency response. Interventions will focus on rehabilitation and reconstruction of damaged infrastructure while the long-term sustainability and climate resilience are taken into account. The project will support post-disaster recovery in the sectors of water resources and flood management, urban, and transport, which are critical to social and economic recovery of the project municipalities and the province.

The project covers activities in the areas: 1) water and flood management interventions such as river dredging, dike rehabilitation and strengthening; 2) urban infrastructure rehabilitation and improvement including urban river flood management, drainage and sewerage systems, as well as public transport systems; and 3) transport infrastructure, mainly rehabilitation and reconstruction of urban and rural roads. The project will also support the development and strengthening of flood emergency response management systems and capacity building, and support for project management in the three project municipalities.

As an emergency project, a framework approach was adopted for overall project design while a list of project activities consistent with the framework were proposed by the government based on the agreed sub-project selection criteria. The individual investment interventions, or sub-projects, selected during the preparation stage have been further screened and appraised during project implementation. A Project Implementation Manual (PIM), acceptable to AIIB, to guide the project implementation in all aspects, has been developed and are being used by each project municipality.

3. Key Dates

Approval:	Nov. 25, 2021	Signing:	May. 16, 2022
Effective:	Aug. 12, 2022	Restructured (if any):	
Orig. Closing:	Jun. 30, 2026	Rev. Closing (if any):	

4. Disbursement Summary (EUR million)

Contract Awarded:		Cancellation (if any):	0.00
Disbursed:	350.43	Most recent disbursement (amount/date):	59.83/Aug. 24, 2023
Undisbursed:	514.57	Disbursement Ratio (%) ¹ :	40.51

5. Project Implementation Update

The Project consists of 22 sub-projects in three municipalities, among which 3 sub-projects are for project management support, 5 for smart water management and flood emergency response system development, and 11 related to infrastructure re-construction and development. Since the loan was declared effective in Aug. 22, 2022, the project has disbursed 40.51% of the total amount as of Oct. 2023, submission date of the second PIMR report. The loan has been disbursed as follows: A first disbursement of EUR167,500,000 was made on Sept. 29, 2022; a second disbursement of EUR123,450,000 was made on Nov. 30, 2022; and a third disbursement of EUR 59,830,000 was made on Aug 24, 2023.

¹ Disbursement Ratio is defined as the volume (e.g. the dollar amount) of total disbursed amount as a percentage of the net committed volume.

About 89.74% 70 out of the total of 78 contracts, as updated in the procurement plan for the entire Project, i.e. 70 contracts for 13 sub-projects, have completed tendering process and signed contracts. Implementation of 13 sub-projects under the three Project components has been already in the constructions stage. More specifics are as follows:

The Zhengzhou Component: 34 contracts in total (29 works remain while 3 works are cancelled, 1 goods, 4 services), among which procurement for 32 contracts (28 works, 4 services) has been completed. 1 works contract for the Integrated Jinshui River Management sub-project is under procurement and 1 goods contract for development of an urban flood early warning and emergency system is to be procured. Construction of the priority works for flood management of two rivers, i.e. the Jinshui River and the Ying River, started from May 2022 and completed the major works. Construction of the main river sections of Jinshui River and Ying River are planned to be completed of the major works by early 2024. Construction of the Zhengzhou rural roads sub-project started from late 2022 and is expected to be completed by early 2024.

The Xinxiang Component: 13 contracts in total (6 works remain while 2 works cancelled, 5 goods, 2 services), among which the procurement for 11 contracts (5 works, 4 goods, 2 services) has been completed. 1 works contract for Weihui Cang River and 1 goods contract for development of Xinxiang integrated flood emergency response system are to be procured. 4 contracts for the sub-project of rehabilitation of national and provincial highways have already completed the major works in 2022. Procurement of 204 EV buses was completed in 2022 and the buses were delivered to the Xinxiang Municipality in 2022 for operation. Bus Terminals and procurement of electric charging stations have completed major works in 2023.

The Jiaozuo Component: 31 contracts in total (24 works, 3 goods, 4 services), among which the procurement for 27 contracts (23 works, 4 services) has been completed. 1 works contract for rehabilitation of Tian Jian River sub-project and 3 goods contracts for development of an integrated flood emergency response system are to be procured. Construction for contracts of Dasha River, Shanmen River subprojects and subprojects of urban road and canal rehabilitation has started in late 2022 and been progressing well.

Project management support consultancy teams for the three municipalities have been on board since the 3rd quarter of 2022.

As reported by the Provincial PMO and the three municipality PMOs, significant amount of savings may be expected, given the total value of the awarded contracts so far. Total cost savings as of June 2023 is around EUR 270 million (equivalent RMB 2 billion), around 31% of the total AIIB loan. The main source of the savings is from procurement activities, namely the differences between the awarded contract price and planned budget for a number of sub-projects. The three project cities have proposed alternative projects for mid-term adjustment, to maximize utilization of the AIIB loan for post-disaster rehabilitation and enhancement of urban water management infrastructure. A project change is under preparation and processing.

Components	Physical Progress	Environmental & Social Compliance	Procurement
Zhengzhou Component (AIIB loan USD600 million). This component supports civil works and goods required for rehabilitation and reconstruction activities in the	29.15% of the budgeted investment completed. The physical progress is based on the amount confirmed by employer's representative.	Implementation and progress of E&S related work in the past several months is considered as Satisfactory. It has been noted that the E&S related actions agreed have been accomplished and observed that each contractor has its ESMP and assigned an E&S coordinator to coordinate E&S management.	34 contracts in total (29 works remain while 3 works are cancelled, 1 goods, 4 services), among which procurement for 32 contracts (28 works, 4 services) has been completed. 1 works contract for the Integrated Jinshui River Management sub-project is under

<p>water and flood management, urban and transport sectors in Zhengzhou municipality. The sub-projects are:</p> <p>(a) Integrated Jinshui River Management sub-project, including riverbank protection, river dredging, reconstruction of riverside roads and bridges, improvement of drainage and sewerage systems, and riverside green spacing and river ecosystems, amongst others; (b) rehabilitation of rural roads and bridges; (c) rehabilitation of the Ying River in Dengfeng City; (d) development of an integrated flood risk management system and strengthening the capacity for emergency response; and (e) project management support for capacity building in procurement, financial management, environmental and social (ES) management and other technical areas.</p>		<p>Environmental impacts (e.g. traffic, safety, noise, dust) are also well managed during the subproject construction.</p> <p>As for involuntary resettlement, it has been observed that as at June 30,2023, only Jinshui river sub-project at Zhengzhou starts land acquisition and resettlement activities. It has completed the permanent land acquisition of 350.83 mu (52% of total), the temporary land occupation of 200 mu (94%), the demolition of residential housing of 711 square meters with affected 22 people in 6 households (completed), and non-residential structure of 9,480 square meters with affected 9 HHS (53% of total). The external monitoring consultants reported that all compensation was paid at replacement price, livelihood restoration measures such as training, job creation, and pension security for land lost persons are being conducted.</p>	<p>procurement and 1 goods contract for development of an urban flood early warning and emergency system is to be procured.</p>
<p>Xinxiang Component (AIIB loan USD200 million)</p> <p>This component</p>	<p>26.04% of the budgeted investment completed.</p> <p>The physical progress is based on the amount confirmed by the</p>	<p>E&S institutional arrangement is well established. PMO, PIUs and contractors have their E&S staff or coordinator to manage/coordinate the ES work. E&S consultants under PMC (project management</p>	<p>13 contracts in total (6 works remain while 2 works cancelled, 5 goods, 2 services), among which the procurement for 11 contracts (5 works, 4 goods,</p>

<p>supports activities to recover damaged infrastructure in the three sectors in Xinxiang municipality: (a) rehabilitation of rivers and canals including river dredging and dike strengthening; (b) rehabilitation of national and provincial highways, urban bus terminals and purchase of electrical buses; (c) rehabilitation and improvement of urban drainage systems; (d) development of integrated flood emergency response system; and (e) project management support.</p>	<p>Employer's Representative</p>	<p>consultant) are all onboard and the third-party E&S consultants/firms has been entrusted to meet the need of the project E&S management.</p>	<p>2 services) has been completed. 1 works contract for Weihui Cang River and 1 goods contract for development of Xinxiang integrated flood emergency response system are to be procured.</p>
<p>Jiaozuo Component (AIIB loan USD200 million)</p> <p>This component consists of interventions to support the recovery of Jiaozuo municipality, including: (a) rehabilitation of rivers and canals including river dredging and dike strengthening; (b) rehabilitation and improvement of the urban canals, drainage and sewage systems, and roads; (c) development of an integrated flood emergency</p>	<p>1.36% of the budgeted investment completed.</p> <p>The physical progress is based on the amount confirmed by the employer's representative. There's work completed but pending the verification of supervision engineers.</p>	<p>E&S institutional arrangement is well established. PMO, PIUs and contractors have their E&S staff or coordinator to manage/coordinate ES work. E&S consultants under PMC (project management consultant) are all onboard and the third-party E&S consultants/firms has been entrusted to meet the need of the project E&S management.</p>	<p>31 contracts in total (24 works, 3 goods, 4 services), among which the procurement for 27 contracts (23 works, 4 services) has been completed. 1 works contract for rehabilitation of Tian Jian River sub-project and 3 goods contracts for development of an integrated flood emergency response system are to be procured.</p>

response system including a smart river management system and a smart urban water management system; and (d) project management support.			
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Financial Management:

The project has been maintaining project financial management system agreed during project appraisal. Financial institutional arrangement including sufficient and capable PMO staff and experienced PMC team are in place to use the MIS in keeping project financial accords, generating financial statements in the format required by the Bank, processing contract payment and disbursement applications. Project financial audits are conducted on semi-annual basis in accordance with legal agreement. The audit reports could be submitted without much delay and remedial actions were taken by various implementing agencies to address the issues identified. The overall project financial management performance is satisfactory to the Bank.

According to the project financial statements for period ended Jun 30, 2023, the cumulative investment is 25% of the total budget. Specifically for each component: Zhengzhou is 31%, Xinxiang is 26% and Jiaozuo is 2%. Such accounted progress in financial terms lags behind the physical progress. Main reasons are over estimated budget, overrun contracts not accounted, adjusted activities (in Xinxiang) were not accounted. According to contract implementation summary, the total contract implemented is 52% while cumulative payment is 42%. In terms of Bank loan proceeds, more than 70% of the advance (EUR290.6 million) has been paid for project expenditures and the client is compiling documents for reporting expenditures to the Bank and getting more advances.

Overall, each PIU are advised to accelerate the contract measurement and payment progress to contractors.

6. Status of the Grievance Redress Mechanism (GRM)

The Bank Project Team was informed that so far there has been no complaints received across all three project municipalities. The information about the GRM and AIIB's Project-affected People's Mechanism (PPM) had been made available on the relevant PMO and PIU's websites. And as per the Bank's suggestions during previous mission, the three PMOs developed a template to standardize the disclosure of the project GRM at the three project municipalities, and most PIUs disclosed the GRM and PPM on site accordingly.

7. Results Monitoring (please refer to the full RMF, which can be found on the last page of this PIMR)

The project made good progress in first half of 2023. As of June 2023, the Zhengzhou Component has achieved 1 out of 5 targets for the objective-level indicators and 2 out of 9 targets for the intermediate indicators. In addition, for 1 objective-level indicator and 5 intermediate indicators in this component, more than 50% of their target values, respectively, have been achieved. The Xinxiang Component has achieved 0 out of 4 targets of the objective-level indicators and 3 out of 12 targets for the intermediate indicators. The Jiaozuo component has achieved 1 out of 3 targets for the objective-level indicators, 2 out of 9 targets for the intermediate indicators. More details are recorded in full RMF. However, measurement of the progress in terms of project level indicators is not yet possible because the measurement of the targets at the project objective level can only make sense at the time of completion of the entire sub-project. In the current report, the reported physical progress and intermediate results are based on the amount verified and confirmed by the Employer's representatives. The reported physical progress is generally less than the actual progress, which is pending the confirmation of the Employer's representatives.

Remarks:

Project Objective Indicators	Indicator level	Unit of Measure	Cumulative Target Values																	Frequency	Responsibility	Comments
			Baseline		2020		2021		2022		2023		2024		2025		End Target					
			Year	Value	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Year	Target	Actual			
Zhengzhou - Flood protection standards of the rivers under the project improved.	Project	Number	2020	0	0		0		0		4	4	4		4			4		Annual	PIU - Zhengzhou Urban and Rural Construction Bureau	
Zhengzhou - Flood protection standards of the rivers under the project improved.	Project	Number	2020	0	0		0		1		1	0	1		1			1		Annual	PIU - Dengfeng Water Resources Bureau	
Zhengzhou - Urban drainage systems under the project rehabilitated with improved urban drainage standards.	Project	Number	2020	0	0		0		8		8	7	8		8			8		Annual	PIU - Zhengzhou Urban and Rural Construction Bureau	
Zhengzhou - Damaged rural roads under the project reconstructed.	Project	Km	2020	0	0		45		783		783	682	783		783			783		Annual	PIU - Zhengzhou Road Development Center	
Zhengzhou - Flood emergency response system developed or improved.	Project	Number	2020	0	0		0		0		1	0	1		1			1		Annual	PIU - Zhengzhou Urban and Rural Construction Bureau	
Xinxiang - Flood protection standards of the rivers under the project improved.	Project	Number	2020	0	0		0		0		3	0	3		3			3		Annual	PIU - Xinxiang Water Resources Bureau PIU - Xinxiang Urban and Rural Construction Bureau PIU - Weihui Water Resources Bureau	
Xinxiang - Urban drainage systems under the project rehabilitated with improved urban drainage standards.	Project	Number	2020	0	0		0		0		2	0	2		2			2		Annual	PIU - Xinxiang Urban and Rural Construction Bureau	

Xinxiang - Damaged urban public transport systems/Terminals under the project recovered.	Project	Number	2020	0	0	0	0	4	4	0	4	4	4	4	4	Annual	PIU - Xinxiang Transport Bureau	
Xinxiang - Flood emergency response system developed or improved.	Project	Number	2020	0	0	0	0	1	1	0	1	1	1	1	1	Annual	PIU - Xinxiang Water Resources Bureau PIU - Xinxiang Urban and Rural Construction Bureau PIU - Xinxiang Emergency Bureau	
Jiaozuo - Flood protection standards of the rivers under the project improved.	Project	Number	2020	0	0	0	0	0	1	1	2	2	2	2	2	Annual	PIU - Jiaozuo Water Resources Bureau	
Jiaozuo - Urban drainage systems under the project rehabilitated with improved urban drainage standards.	Project	Number	2020	0	0	0	0	0	1	0	1	2	2	2	2	Annual	PIU - Jiaozuo Housing and Urban Construction Bureau	
Jiaozuo - Flood emergency response system developed or improved	Project	Number	2020	0	0	0	0	0	1	0	1	1	1	1	1	Annual	PIU - Jiaozuo Emergency Bureau	

Project Intermediate Indicators	Indicator level	Unit of Measure	Cumulative Target Values																Frequency	Responsibility	Comments	
			Baseline		2020		2021		2022		2023		2024		2025		End Target					
			Year	Value	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Year	Target				Actual
Zhengzhou - Urban Road Rehabilitated and constructed	Project	km	2020	0	0	0	0	0	0	1.3	0	1.3	1.3	1.3	1.3	1.3	1.3	Semi-annual	PIU - Zhengzhou Urban and Rural Construction Bureau			
Zhengzhou - Urban Dikes rehabilitated and constructed	Project	km	2020	0	0	0	0	4.8	38.8	32.2	38.8	38.8	38.8	38.8	38.8	38.8	38.8	Semi-annual	PIU - Zhengzhou Urban and Rural			

																					Construction Bureau	
Zhengzhou - Urban Bridges rehabilitated and constructed	Project	number	2020	0	0	0	20	60	32	60	60	60	60	60	60	60	60	60	60	Semi-annual	PIU Zhengzhou Urban and Rural Construction Bureau	-
Zhengzhou - Pumping Stations rehabilitated and constructed	Project	number	2020	0	0	0	0	3	0	3	3	3	3	3	3	3	3	3	3	Semi-annual	PIU Zhengzhou Urban and Rural Construction Bureau	-
Zhengzhou - Urban sewage pipelines rehabilitated	Project	km	2020	0	0	0	7.6	9.6	6.16	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	Semi-annual	PIU Zhengzhou Urban and Rural Construction Bureau	-
Zhengzhou - Rural roads rehabilitated	Project	km	2020	0	0	45	783	783	682	783	783	783	783	783	783	783	783	783	783	Semi-annual	PIU Zhengzhou Road Development Center	-
Zhengzhou - Rural bridges rehabilitated and constructed	Project	number	2020	0	0	12	163	175	103	175	175	175	175	175	175	175	175	175	175	Semi-annual	PIU Zhengzhou Road Development Center	-
Zhengzhou - Sedimentated rivers dredged	Project	Km (and/or m3)	2020	0	0	0	8	8	9.75	8	8	8	8	8	8	8	8	8	8	Semi-annual	PIU Zhengzhou Urban and Rural Construction Bureau	-
Zhengzhou - Sedimentated rivers dredged	Project	Km (and/or m3)	2020	0	0	0	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	Semi-annual	PIU Dengfeng Water Resources Bureau	-
Xinxiang - Urban Road Rehabilitated and constructed	Project	km	2020	0	0	0	0	2.3	0	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	Semi-annual	PIU - Xinxiang Urban and Rural Construction Bureau	-
Xinxiang - Urban Dikes rehabilitated and constructed	Project	km	2020	0	0	0	0	13	0	13	13	13	13	13	13	13	13	13	13	Semi-annual	PIU - Xinxiang Urban and Rural Construction Bureau	-
Xinxiang - Urban Bridges	Project	number	2020	0	0	0	0	1	0	1	1	1	1	1	1	1	1	1	1	Semi-annual	PIU - Xinxiang Urban and	-

rehabilitated and constructed																					Rural Construction Bureau
Xinxiang - Pumping Stations rehabilitated and constructed	Project	number	2020	0	0	0	0	1	0	1	1	1	1	1	Semi-annual	PIU - Xinxiang Urban and Rural Construction Bureau					
Xinxiang - Urban stormwater pipeline constructed	Project	km	2020	0	0	0	0	4	0	4	4	4	4	Semi-annual	PIU - Xinxiang Urban and Rural Construction Bureau						
Xinxiang - Urban sewage pipelines constructed	Project	km	2020	0	0	0	0	2	0	2	2	2	2	Semi-annual	PIU - Xinxiang Urban and Rural Construction Bureau						
Xinxiang - National/Provincial highways rehabilitated	Project	km	2020	0	0	0	168	168	168.5	168	168	168	168	Semi-annual	PIU - Xinxiang Transport Bureau						
Xinxiang - Highway bridges rehabilitated and constructed	Project	number	2020	0	0	0	10	10	10	10	10	10	10	Semi-annual	PIU - Xinxiang Transport Bureau						
Xinxiang - Electrical Buses purchased	Project	number	2020	0	0	0	204	204	204	204	204	204	204	Semi-annual	PIU - Xinxiang Transport Bureau						
Xinxiang - Rural Dikes rehabilitated and constructed	Project	km	2020	0	0	0	0	11.35	0	11.35	11.35	11.35	11.35	Semi-annual	PIU - Xinxiang Water Resources Bureau						
Xinxiang - Sedimented rivers dredged (urban areas)	Project	km (and/or m3)	2020	0	0	0	0	13km / 1 million m3	0	13km / 1 million m3	13km / 1 million m3	13km / 1 million m3	13km / 1 million m3	Semi-annual	PIU - Xinxiang Urban and Rural Construction Bureau						
Xinxiang - Sedimented rivers dredged (rural areas)	Project	km	2020	0	0	0	0	11.135 / 2.5 million m3	0	11.135 / 2.5 million m3	11.135 / 2.5 million m3	11.135 / 2.5 million m3	11.135 / 2.5 million m3	Semi-annual	PIU - Xinxiang Water Resources Bureau						
Jiaozuo - Urban Road Rehabilitated and constructed	Project	km	2020	0	0	1.2	5.9	11.8	17.4	20.9	23.7	23.7	23.7	Semi-annual	PIU - Jiaozuo Housing and Urban Construction Bureau						
Jiaozuo - Urban Dikes rehabilitated and constructed	Project	km	2020	0	0	3.4	11.6	19.8	0	28	36.2	36.2	36.2	Semi-annual	PIU - Jiaozuo Housing and Urban Construction						

																					Bureau	
Jiaozuo - Urban Bridges rehabilitated and constructed	Project	number	2020	0	0	2		8		14	1	14		14						Semi-annual	PIU - Jiaozuo Housing and Urban Construction Bureau	
Jiaozuo - Pumping Stations rehabilitated and constructed	Project	number	2020	0	0	0		2		2	0	2		2						Semi-annual	PIU - Jiaozuo Housing and Urban Construction Bureau	
Jiaozuo - Urban stormwater pipeline rehabilitated	Project	km	2020	0	0	0		8		18	13	25		31.7						Semi-annual	PIU - Jiaozuo Housing and Urban Construction Bureau	
Jiaozuo - Urban sewage pipelines rehabilitated	Project	km	2020	0	0	0		7		13	15.6	16		16						Semi-annual	PIU - Jiaozuo Housing and Urban Construction Bureau	
Jiaozuo - Rural Dikes rehabilitated and constructed	Project	km	2020	0	0	0		10		21	9.7	21		21						Semi-annual	PIU - Jiaozuo Water Resources Bureau	
Jiaozuo - Sedimentated rivers dredged (urban areas)	Project	Km (and/or m3)	2020	0	0	2km / 2,000 m3		5km / 40,000 m3		8km / 60,000 m3	0	12km / 120,000 m3		18km / 170,000 m3						Semi-annual	PIU - Jiaozuo Housing and Urban Construction Bureau	
Jiaozuo - Sedimentated rivers dredged (rural areas)	Project	Km (and/or m3)	2020	0	0	0		5km / 0.5 million m3		20km / 1 million m3	8.72km/ 0.45 million m3	50km / 2.8 million m3		50km / 2.8 million m3							Semi-annual	PIU - Jiaozuo Water Resources Bureau