

## 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:	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; Jingjing Zhao, Back-up PTL; Yanyang Shi, Project admin		
Completed Site Visits by AIIB:	Aug, 2022 project launch mission to support the project implementation in all aspects including technical, financial management, environmental and social management, procurement among others Feb, 2023 In-person monitoring mission to site projects in Henan Province. Review of procurement, environmental, social and implementation aspects of the Project.		
Planned Site Visits by AIIB:	Sep, 2023 Potential planned site visit.		
Current Red Flags Assigned:	0		
Current Monitoring Regime:	Regular Monitoring		
Previous Red Flags Assigned:			
Previous Red Flags Assigned Date:			

### 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:	290.60	Most recent disbursement (amount/date):	123.45/Nov. 30, 2022
Undisbursed:	574.40	Disbursement Ratio (%) <sup>1</sup> :	33.60

### 5. Project Implementation Update

The Project consists of 22 sub-projects in three municipalities, among which three sub-projects are for project management support, five for smart water management and flood emergency response system development, and 14 related to infrastructure re-construction and development. Since the loan was declared effective in Aug-22 the project has disbursed more than 33% of the total amount. The loan has been disbursed as follows: A first disbursement of EUR167,500,000, was made on Sept 29, 2022, and a second disbursement of EUR123,450,000 was made on Nov 30, 2022.

About 75% of the total of 83 contracts, as updated in the procurement plan for the entire Project, i.e. 62 contracts for 14 sub-projects, have entered into or completed tendering process. More specifics are as follows: Implementation of 6 sub-projects under the three Project components has been already in the constructions stage.

The Zhengzhou Component: 37 contracts in total (32 works, 1 goods, 4 services), among which procurement for 32 contracts (28 works, 4 services) has completed. 4 works contracts for the Integrated Jinshui River Management sub-project and 1 goods contract for development of a urban flood early warning and emergency system are to be

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

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 Zhengzhou rural roads sub-project started from late 2022 and is expected to complete the major works by April 2023;

The Xinxiang Component: 15 contracts in total (8 works, 5 goods, 2 services), among which the procurement for 11 contracts (5 works, 4 goods, 2 services) has completed. The procurement of 3 works contracts 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 completed the major constructions already in 2022. Procurement of 204 EV buses was completed in 2022 and the buses were delivered to the Xinxiang City in 2022 for operation.

The Jiaozuo Component: 31 contracts in total (24 works, 3 goods, 4 services), among which the procurement for 19 contracts (17 works, 2 services) has completed. 7 works contracts for rehabilitation of rivers and canals sub-projects and 3 goods contracts for development of an integrated flood emergency response system are to be procured. Construction for some contracts of the rehabilitation of urban canals and roads in Jiaozuo has just started.

Project management support consultancy teams for the three cities 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. The expected savings from each of the Project components were estimated at, RMB 500 million for Zhengzhou, RMB700 million for Xinxiang, and RMB270 million for Jiaozuo, respectively, totaling over RMB 1,470 million, or about EUR200 million equivalent. The Bank recommended that the three PMOs, under the guidance of the Provincial PMO, plan ahead and propose new or alternate sub-projects within the Project framework to the Bank for further review.

Components	Physical Progress	Environmental & Social Compliance	Procurement
<p>Zhengzhou Component (AIIB loan USD600 million).</p> <p>This component supports civil works and goods required for rehabilitation and reconstruction activities in the water and flood management, urban and transport sectors in Zhengzhou municipality. The sub-projects are: (a) Integrated Jinshui River Management sub-project, including riverbank protection, river</p>	<p>8% of the budgeted investment completed.</p> <p>The physical progress is based on the amount confirmed by employer's representative.</p>	<p>Based on the preparation progress and quality of E&amp;S related work in the past several months, the Bank's missions' review and assessment through site visits, the performance of the E&amp;S Management is considered as Satisfactory.</p> <p>It has been noted that the E&amp;S related actions agreed under the previous mission(s) have been accomplished and observed that each contractor has its ESMP and assigned an E&amp;S coordinator to coordinate E&amp;S management. Local labors/workers are recruited as a priority and women labor accounts for 20-30%, 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 Jan 30,</p>	<p>The Zhengzhou Component has 37 contracts in total (32 works, 1 goods, 4 services), among which procurement of 32 contracts (28 works, 4 services) has completed. 4 works contracts under Integrated Jinshui River Management project and 1 goods contract for development of flood emergency system are to be procured.</p>

<p>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>2023, only Jinshui river sub-project at Zhengzhou had started land acquisition and resettlement. It had completed the permanent land acquisition of 23.4 ha (52% of total) and the demolition of 10,191 square meters of identified structures (55% of total). The external ES monitoring reported that all compensation was paid at replacement cost, livelihood restoration measures such as training, job creation, and pension security for land lost persons were being conducted. The Bank recommended that the associated facilities of the Jingshui River sub-project should be also monitored and the findings should be presented in the monitoring report. Furthermore, PMOs and PIUs were encouraged to obtain the land use approval documents as soon as possible and send the timeline to the Bank for record.</p> <p>The first draft of the E&amp;S semi-annual external monitoring report for Jingshui River subproject is expected to be submitted to the Bank by March 15, 2023.</p>	
<p>Xinxiang Component (AIIB loan USD200 million) This component 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</p>	<p>23.2% of the budgeted investment completed.</p> <p>The physical progress is based on the amount confirmed by the Employer's Representative</p>	<p>E&amp;S institutional arrangement is well established. PMO, PIUs and contractors have their E&amp;S staff or coordinator (name list should be incorporated into next progress report). E&amp;S internal consultants under PMC (project management consulting firm) are all onboard and the third-party E&amp;S consultants/firms are being/has been entrusted to meet the need of the project E&amp;S management. In addition, the internal ESMP implementation and monitoring report under the overall project report has been prepared quarterly during the first-year of implementation.</p>	<p>The Xinxiang Component has 15 contracts in total (8 works, 5 goods, 2 services). 11 contracts (5 works, 4 goods, 2 services) has completed. The procurement of 3 works contracts and 1 goods contract for development of Xinxiang integrated flood emergency response system are to be procured.</p>

<p>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>It was, however, observed that some contractors did not fully understand the requirements laid out in the ESMP. For example, on-site labor management and GBV management were not documented capacity building of contractors is needed to standardize the implementation of ESMP across all sub-projects. It was agreed that an ESMP implementation template will be developed by each of the PMOs, supported by E&amp;S consultants, to standardize the ESMP implementation.</p>	
<p>Jiaozhuo Component (AIIB loan USD200 million) 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 response system including a smart river management system and a smart urban water management system; and (d) project management support.</p>	<p>0.4% of the budgeted investment completed.  The physical progress is based on the amount confirmed by the employer's representative</p>	<p>E&amp;S institutional arrangement is well established. PMO, PIUs and contractors have their E&amp;S staff or coordinator (name list should be incorporated into next progress report). E&amp;S internal consultants under PMC (project management consulting firm) are all onboard and the third-party E&amp;S consultants/firms are being/has been entrusted to meet the need of the project E&amp;S management. In addition, the internal ESMP implementation and monitoring report under the overall project report has been prepared quarterly during the first-year of implementation.</p> <p>It was, however, observed during the site visit that some contractors did not fully understand the requirements laid out in the ESMP. For example, on-site labor management and GBV management were not documented capacity building of contractors is needed to standardize the implementation of ESMP across all subprojects. It was agreed that an ESMP implementation template will be developed by each of the PMOs, supported by E&amp;S consultants, to standardize the ESMP implementation.</p>	<p>The Jiaozuo Component has 31 contracts in total (24 works, 3 goods, 4 services). The procurement for 19 contracts (17 works, 2 services) has completed. 7 works contracts for rehabilitation of rivers and canals sub-projects and 3 goods contracts for development of an integrated flood emergency response system are to be procured. Construction for some contracts of the rehabilitation of urban canals and roads in Jiaozuo has just started.</p>

**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 records, 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 overall project financial management performance is satisfactory to the Bank.

According to the project financial statements for period ended Dec. 31, 2022, the cumulative investment is 9.8% of the total budget. Specifically for each components: Zhengzhou is 8%, Xinxiang is 23% and Jiaozuo is 0.36%. 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 40% while cumulative payment is 20% for the AIIB Loan and 1.5% for the counterpart funds. In terms of Bank loan proceeds, only 30% of the advance (EUR290.6 million) was paid for project expenditures.

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

#### **6. Status of the Grievance Redress Mechanism (GRM)**

The mission was informed that so far there has been no complaints received across all three project municipalities. Although 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, the mission noted that they were not disclosed to workers and communities on site in an appropriate manner. The mission encouraged the PMOs and PIUs to develop a template to standardize the disclosure of the project GRM at the three project municipalities.

#### **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 2022 even with the significant impact by the covid-19 situation. A large amount of effort of the implementing agencies and the Bank team were made in technical preparation and environmental and social safeguards while constructions for some key activities, such as reconstruction of some river sections critical to urban flood protection, damaged highways and rural roads important for the recovery of economic activities and people's life, have started since May 2022. 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	0	4		4		4			4		Annual	PIU - Zhengzhou Urban and Rural Construction Bureau	The Project Objective level indicators have not been measured yet given the targets could only be achieved upon completion of the entire sub-project. Same as for the following indicators for the river management sub-projects.
Zhengzhou - Flood protection standards of the rivers under the project improved.	Project	Number	2020	0	0		0		1	0	1		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	0	8		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	305.76	783		783		783			783		Annual	PIU - Zhengzhou Road Development Center	
Zhengzhou - Flood emergency response system developed or improved.	Project	Number	2020	0	0		0		0	0	1		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	0	3		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	0	2		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		4	0	4		4		4			4	Annual	PIU - Xinxiang Transport Bureau
Xinxiang - Flood emergency response system developed or improved.	Project	Number	2020	0	0		0		1	0	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		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		1		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		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	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		4.8	0.72	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	3	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	0	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	0.55	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	305.76	783		783		783		783				Semi-annual	PIU Zhengzhou Road Development Center	-
Zhengzhou - Rural bridges rehabilitated and constructed	Project	number	2020	0	0	12		163	110.5	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	0.72	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	8	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	0	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	0	13		13		13		13				Semi-annual	PIU - Xinxiang Urban and Rural Construction Bureau	-
Xinxiang - Urban Bridges	Project	number	2020	0	0	0		0	0	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	0	0	1	1	1	1	1	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	0	0	4	4	4	4	4	4	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	0	0	2	2	2	2	2	2	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	150	168	168	168	168	168	168	168	168	168	168	168	Semi-annual	PIU – Xinxiang Transport Bureau
Xinxiang - Highway bridges rehabilitated and constructed	Project	number	2020	0	0	0	10	9	10	10	10	10	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	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	0	11.35	11.35	11.35	11.35	11.35	11.35	11.35	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	0	13km / 1 million m3	13km / 1 million m3	13km / 1 million m3	13km / 1 million m3	13km / 1 million m3	13km / 1 million m3	13km / 1 million m3	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	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	11.135 / 2.5 million m3	11.135 / 2.5 million m3	11.135 / 2.5 million m3	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	0	11.8	20.9	23.7	23.7	23.7	23.7	23.7	23.7	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	0	19.8	28	36.2	36.2	36.2	36.2	36.2	36.2	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	0	14		14		14				14	Semi-annual	PIU - Jiaozuo Housing and Urban Construction Bureau
Jiaozuo - Pumping Stations rehabilitated and constructed	Project	number	2020	0	0	0		2	0	2		2		2				2	Semi-annual	PIU - Jiaozuo Housing and Urban Construction Bureau
Jiaozuo - Urban stormwater pipeline rehabilitated	Project	km	2020	0	0	0		8	0	18		25		31.7				31.7	Semi-annual	PIU - Jiaozuo Housing and Urban Construction Bureau
Jiaozuo - Urban sewage pipelines rehabilitated	Project	km	2020	0	0	0		7	0	13		16		16				16	Semi-annual	PIU - Jiaozuo Housing and Urban Construction Bureau
Jiaozuo - Rural Dikes rehabilitated and constructed	Project	km	2020	0	0	0		10	0	21		21		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	0	8km / 60,000 m3		12km / 120,000 m3		18km / 170,000 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	0	20km / 1 million m3		50km / 2.8 million m3		50km / 2.8 million m3				50km / 2.8 million m3	Semi-annual	PIU - Jiaozuo Water Resources Bureau