

Directorate General Monitoring & Evaluation

Planning & Development Board Government of the Punjab



No. DGM&E/MTR/AD (B-1)/2023/16/2395 Dated: /EMay 2023

To,

1. The Secretaries,

Government of the Punjab,

- i. Planning & Development Board
- ii. Finance Department
- iii. Housing Urban Development & Public Health Engineering Department

Subject: MONITORING REPORT OF THE PROJECT "URBAN WATER SUPPLY SCHEME KAHNA PHASE I AND II"

I am directed to refer to the subject cited above.

- 2. Kindly find enclosed herewith a copy of the Monitoring report of the project titled "Urban Water Supply Scheme Kahna Phase I And II". This Project report also can be downloaded from the DG M&E Website, which is as follows: http://dgme.punjab.gov.pk/monitoring/
- 3. The project will be discussed shortly in the forthcoming Monitoring Committee Meeting (MCM). Any comment/feedback can be submitted to the DGM&E.

Engr. Arif Ahsan Assistant Director (Buildings)

A copy is forwarded for information to the:

1. The Member (Social Infrastructure Wing), P&DB, Government of the Punjab

2. Superintendent Engineering Lahore, Public Health Engineering Department, Govt. of the Punjab.

3. Director Coordination, DGM&E, P&D Board, Government of the Punjab.

- 4. Director Project Management, DGM&E, P&D Board, Government of the Punjab.
- 5. PSO to Chairman, P&D Board, Government of the Punjab
- 6. PA to DG (M&E), P&D Board, Government of the Punjab.



Directorate General Monitoring and Evaluation

Planning and Development Board, Government of the Punjab





MONITORING REPORT ON THE PROJECT URBAN WATER SUPPLY SCHEME KAHNA PHASE I AND II



Directorate General Monitoring & Evaluation Planning and Development Board Government of the Punjab

Written By
Engr. Arif Ahsan
(Assistant Director Buildings)

May 2022

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	MONITORING RATING INDEX								
Sr. No	Phase	Criteria		Maximum Point	Points Obtained				
		Fea		spect to threshold of cos	t of Project)				
P1.1		i	Yes	5					
		ii	No	0	0				
		Sta		t in preparation of PC-I					
P1.2		i	Yes	5	5				
		ii	No	0					
D4 0			seline Data in PC-I	_					
P1.3		i	Yes	5	2				
		ii	No	0	0				
	Planning	Sco	ppe Commensurate wit Completely	th Objectives					
P1.4		i	matched	5					
1 1.1		ii	Partially matched	3	5				
		iii	Do not Match	0					
		Res	sult Based Monitoring	Framework					
P1.5		i	Yes	5					
		ii	No	0	0				
		Pro	oject Justification/ Nee	d's Assessment					
P1.6		i	Provided	5	5				
		ii	Not Provided	0					
			Points Ol	otained of Planning =	15				
A	Weightage of P1		((Points Obtained o	of Planning/30 x 100)	10				
71	Indicators			*0.2=	10				
		For	·	eam and Organization (P	MU, PIU, PSU etc.)				
P2.1		i	Formulated	5	_				
		ii	Not Formulated	0	0				
			visions of PC-I	4.0	10				
		i	No Revision	10	10				
P2.2		ii	One Revision	7					
		iii	Two Revision	5					
	Execution	iv	Three or more Revision	2					
			ailability of Documents lding etc.)	s w.r.t (Hiring, Procurem	ent, Trainings, Tenders &				
P2.3		i	Provided	10					
		ii	Partially Provide	5	5				
		iii	Not Provided	0					
P2.4		Int i	ernal Monitoring cond Yes	ucted by Department 5					
1 2.1		ii	No	0	0				
		1							

	MONITORING RATING INDEX							
Sr. No	Phase	Criteria		Maximum Point	Points Obtained			
			tained of Execution=	15				
В	Weightage of P2 Indicators	((Points Obtained of E	xecution/30) x 100) *0.3=	15			
		% I	Difference of Planned &	Physical Progress				
P3.1		i	lesser than 10%	10	10			
1011		ii	in between 10% to 20%	5				
		iii	Greater than 20%	2				
		Data Availability & Response of Project Authorities						
P3.2	Performance	i	Provided	10				
1 3.2		ii	Partially Provide	5	5			
		iii	Not Provided	0				
		Ava	ailability of Quality Con	trol Data				
P3.3		i	Provided	10				
F 5.5		ii	Partially Provide	5	5			
		iii	Not Provided	0				
	Points Obtained of Performance= 20							
С	Weightage of P3		((Points Obtained of	33				
	Indicators			100) *0.5=				

Planning 20%, Execution 30%, Performance 50%

	Total (A+B+C)	58	
Overall Project	Above 70	Within Defined Limits	Green
Grading	35-70	Need Consideration	Yellow
	Below 35	Critical	Red

1. Project Profile

Table 1 Project Summary

Project Title	Urban Water Supply Scheme Kahna Phase I & II.
GS NO.	1331 (2022-23)
Scheme No.	01981307029
Location	Kahna, Lahore
ADP Sector	Water Supply & Sanitation
P&DB Sector	Social Infrastructure Wing
Sub-Sector	Water Supply & Sanitation
Sponsoring Ministry/ Agency	Housing Urban Development & Public Health Engineering Department
Execution Agency	Housing Urban Development & Public Health Engineering Department
Operation & Maintenance	Housing Urban Development & Public Health Engineering Department
PC-I Cost	Rs. 218.579 million
Administrative Approval	01-06-2014
Actual Cost / Expenditure	Rs. 218.579(M) / Rs. 160.537(M)
Planned Start Date	21 -12-2021
Planned End Date	01-12-2023 (As per Agreement)
Actual Start Date	01-10-2014
Gestation Period	9 years 06 months
Beneficiaries	Benefited the Kahna community by providing access to clean water and sanitation facilities. The project has particularly benefited women and children who previously had to walk long distances to fetch water.
Approving Authority	PDWP
% Financial Utilization	73.45 %

Contractor	M/S Pak National
Resident Supervision	M/S Engineering services Consultant.
Design Engineer	P&D office, HUD PHED
Focal Person	Deputy Director (P&D), Public Health Engineering Department (Central) Lahore.

2. Project Objective

The following were the major objective of the project (derived from PC-I document):

Table 2 Project Objective

No.	Project Objective						
1.	Provide access to adequate and equitable sanitation and hygiene						
2.	Improvement in overall environmental condition of the locality						
3.	Raise living standard of the community						

3. Major Deliverables & Procurement of Equipment/Items

The table below presents the results of physical verification of the equipment purchased as part of the project.

Table 3 Verification of Major Deliverables

		PC-I Scop	e		Overall
Sr. No	Description	Unit	Quantity	Amount (PKR in Million)	Weightage Average of Physical Progress %
1	Deep Tube well	No	4.00	11.308	97.52%
2	Pump House (12' x 12')	No	4.00	1.633	78.44%
3	Pumping Machinery VTP	Set	4.00	15.981	81.81%
4	Rising main& Distribution System				-
	3" i/d PVC Pipe	Rft	116103		
	4" i/d PVC Pipe	Rft	27745		
	5" i/d PVC Pipe	Rft	14644		
	6" i/d PVC Pipe	Rft	26481	85.920	
	8" i/d PVC Pipe	Rft	21196		92.387 %
	10" i/d PVC Pipe		7085		
	12" i/d PVC Pipe	Rft	1760		
	14" i/d HDPE Pipe	Rft	2150		
	3" i/d G.I Pipe	Rft	1000		

		PC-I Scop	PC-I Scope			
Sr. No	Description	Unit	Quantity	Amount (PKR in Million)	Weightage Average of Physical Progress %	
	4" i/d G.I Pipe	Rft	500			
	6" i/d G.I Pipe	Rft	600			
	8" i/d G.I Pipe	Rft	400			
5	External Electrification	Job	4	4.850	100%	
6	RCC OHR 100000 Gallons Capacity	No	3	35.729	91.206%	
7	1 Year O & M	Job	1	16.171	-	
8	House Connection	No	6407	20.144	100%	
	Total			191.736		
	Add 10% Price variation charges.	Job		19.174		
	Total			210.910		
	Add 2 % Contingency charges.	Job		3.835		
	Add 2 % Consultancy charges.	Job		3.835		
	Total			218.579		

Total Project Cost

Overall Physical Progress = 75%

= 218.579 (m)

4. Project Major Stakeholders

Following is the Stakeholders of the Project:

Table 4 List of Stakeholders

Sr. No.	Name	Designation	Department	Contact Nos.
			Public Health	
01	Mr. Adnan Zafar	Assistant Engineer	Department, Kahna	0333-4789498
			Lahore	
			Public Health	
02	Mr. Waseem	Sub Engineer	Department, Kahna	0334-4268667
			Lahore	

5. Analysis of Project Expenditures

Detail of year-wise releases and expenditures of funds is given in the table below.

Table 5 Year-wise Financial Details

				Fi	nancial Efficier	ncy
Year	Allocation (Millions)	Releases (Millions)	Utilization (Millions)	PC-I Phasing	Allocation Vs	Releases
				Vs Allocation	Releases	Vs Utilization
2014-15	48.410	48.410	48.410	100%	100%	100%
2015-16	37.799	37.799	37.799	100%	100%	100%

2016-17	25.000	25.000	25.000	100%	100%	100%
2017-18	15.452	15.452	15.452	100%	100%	100%
2018-19	4.930	4.930	4.930	100%	100%	100%
2019-20	3.706	3.706	3.706	100%	100%	100%
2020-21	11.833	11.833	11.833	100%	100%	100%
2021-22	2.00	2.00	2.00	100%	100%	100%
2022-23	20.00	11.407	11.407	100%	57%	100%
Total	169.130	160.537	160.537			

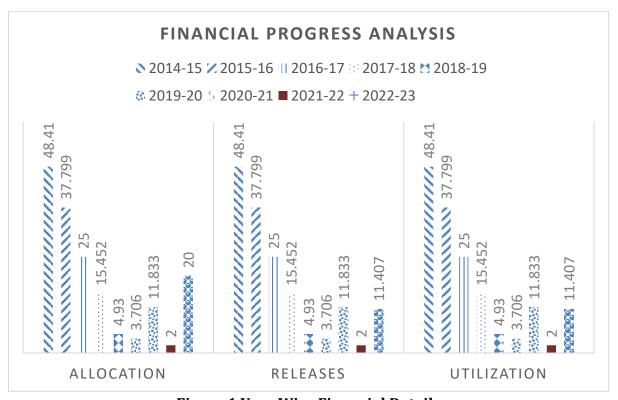


Figure 1 Year Wise Financial Details

6. Project Progress Analysis

The Progress of the project with respect to its plan is given below.

Planned Physical Progress: 96 % as of [April 2023]

Actual Physical Progress: 73 %

• Actual Financial Progress: 74 % (Utilization vs PC-I Cost)

Table 6 Project Progress Analysis

% Planned Progress	% Physical Progress	% Financial Progress	% Difference in Progress		
			Physical Vs Planned	Physical Vs Financial	
97%	76%	74%	-21%	-2%	

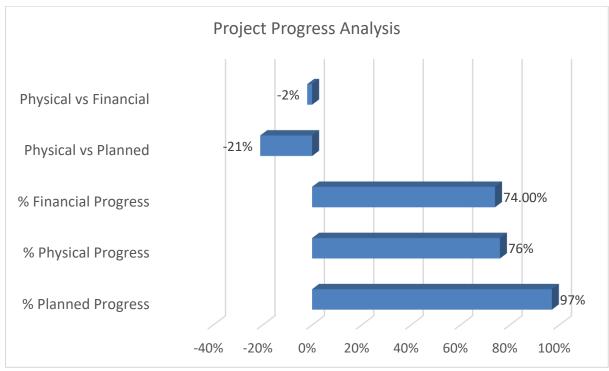


Figure 2 Project Progress Analysis

Observations

Monitoring of the project revealed some facts and figures about the project as per physical inspection and analysis. The observations regarding overall project activities are given in the ensuing paragraphs:

Schedule & Cost:

- 1. This Project was initially administratively approved on 05 May 2016 with a total cost of 199.00 m whereas project cost was revised to 218.580 m on
- 2. Approved gestation period of the project was 36 months till 30th Jun 2024, and the project could achieve it physical and financial progress as follow:

• Planned Physical Progress: 96 % as of [April 2023]

• Actual Physical Progress: 73 %

• Actual Financial Progress: 74 % (Utilization vs PC-I Cost)

3. It was observed during the site visit, the Executing department didn't furnish the schedule plan of activities, a schedule plan for project activities is a significant concern that can lead to various challenges and risks for the project. It is crucial to develop a clear and detailed schedule plan to ensure that project activities are completed within expected timeframes, resources are allocated effectively, and project progress is tracked and evaluated regularly.

Scope of Work:

- 4. The scope of the project was to provide the water supply to the Population the Kahna, Lahore. As per the approved deliverables the Public Health Department had to construct the 3 Over Head Reservoir, and four deep tubes well along with the pump house. During the Site visit of these pumping points, it was observed the civil work executed was not fully in compliance with the technical specifications mentioned in the approved plan. Efflorescence and spelling off the concrete plastering of the Pumping Rooms were noticed. [Figure 02-03] Pumping rooms were deteriorated even before handing over to WASA Lahore.
- 5. The Executing department installed the three vertical turbines at the site connected to the Overhead Reservoirs. Among them only one Turbine pump was functional and remaining two was abandoned due to non-provision of the electric connection. It was observed that the parts of turbines were removed/missing, and the gate valves were not installed [Figure 04-05]. Also, the chambers for the sluice valves were not observed at the sites [Figure 06].
- 6. The detailed estimate of the project includes the painting of the Steel Rising main pipes with the anti-Rust Paint to avoid deterioration of the Steel pipes but during the site

- visit the rusting of the rising main was noticed as not such paint was applied. **[Figure 07-08]**.
- 7. During the site visit, it was noticed that the water gauges were not installed on any of the overhead reservoirs. [Figure 09]. The absence of a water gauge at an overhead water reservoir is a significant concern that can lead to various risks for the water supply system. It is essential to install a water gauge to monitor water levels effectively and ensure that the system is operating efficiently and effectively.
- 8. Inspection Ladders for the Overhead reservoir along with the handrail were missing the Overhead Reservoirs [Figure 9].
- 9. No Quality Control tests were performed as the results for the Steel and concrete strength were not shared with the DG M&E Team.
- 10. Procurement details of the non-Standardized items were not shared with the DG M&E Team.
- 11. The team of supervising consultants, i-e, the Resident Engineer and Assistant resident engineer, were not available at the site as the project was at running phase. Also, the no progress reports of the project were shared with the DG M&E Team.

Health, Safety & Environment:

12. Tests report for the checking the Quality of the water was not available. These tests are mandatory as the water source should be reliable and sustainable. The source should be able to provide water of good quality and quantity to meet the community's water.

7. Recommendations

To optimally realize the project benefits, the following actions/recommendations on the part of sponsoring and executing agencies should be given due consideration. The rationale for the recommendations has been clearly explained and linked with the information collected in the Monitoring process. Recommendations about the project are given in ensuring paragraphs:

- 1. Reference to Observations in Section "Schedule & Cost
 - i. Executing Department should ensure the physical Progress should be monitored and expedited to ensure timely completion.
 - ii. A schedule plan of activities should be prepared to monitor the workflow of the activities.
- 2. Reference to Observations in Section "Scope of Work"
 - i. Missing Component of the Turbines should be ensured to be installed.
 - ii. Provision of the Electricity Connection should be ensured to make the water supply system functional.
 - iii. Anti Rust Paint should be installed on the Rising main to stop steel corrosion.
 - iv. Inspection Ladders for the Overhead reservoir should be completed installed.
 - v. Water gauges should be installed at the Overhead reservoirs.
 - vi. Executing Department should ensure the presence of the consultant staff at the site to efficiently monitor the site activities as per the design specifications.
- 3. Reference to Observations in Section "Risk and Constraints"
 - i. The executing Department should be vigilant enough for the timely completion of all the project activities by improving the project's pace.

8. Photo Gallery



Figure 02 [Efflorescence and Spalling of the Plastering work]



Figure 03 [Efflorescence and Spalling of the Plastering work]

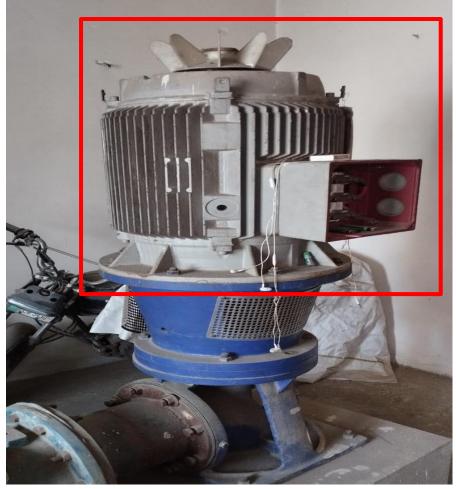


Figure 4 [Missing Component of the Vertical Turbine]



Figure 5 [Missing valves]



Figure 6 [No Valve Chamber was observed]



Figure 7 [Missing Anti Rust Paint on the Steel Rising Main]



Figure 8 [Missing Anti Rust Paint on the Steel Rising Main]



Figure 9 [Missing Water Gauge at Reservior]



GOVERNMENT OF THE PUNJAB HOUSING, URBAN DEVELOPMENT & PUBLIC HEALTH ENGINEERING DEPARTMENT

Dated Lahore, the 01st December, 2022

No.SO(PH-S)8-8/2022(DDSC): In pursuance of P&D Board's letter No.594/AC(Tech)/P&D/2022-23, dated 09.09.2022, revised administrative approval for the following schemes is hereby granted due to 10% cushion allowed for price variation/escalation adjustments on work outlay cost only without change in already approved scope:

Sr. No.	ADP No. (2022-23)		Original/ Amended A.A Cost	Revised A.A Cost
1.	1170	Construction of PCC and Drainage at Manga Mandi, District Lahore (Revised) (A12501-Works-Urban)	199.606	218.985
2.		Provision of clean drinking water, sewerage system, PCC and allied facilities in Manga Mandi, Raiwind Village and adjoining Abadies District Lahore (Revised) (A12502-Works-Rural)		328.636
3.	1249	PCC and Drainage Scheme in UC-247 at Kahna Kohna Lahore (Revised) (A12502- Works-Rural)	200.000	219.41
4.	1284	Provision of clean drinking water, Sewerage system, PCC and allied facilities in Jallo More, Batapur District Lahore (Revised) (A12501-Works-Urban)	500,000	547.98
5.	1331	Urban water Supply Scheme Kahna Phase I and II District Lahore (2 nd Revised) (A12501- Works-Urban)	199.405	218.579

- 2. The revised administrative approval is accorded subject to following conditions:
 - Provision upto 10% price variation is only for estimation purpose. However the payment should be made as per actual in accordance with Clause-55 of Contract Agreement.
 - ii. This provision is only for the projects / schemes approved and awarded prior to 30.06.2022.
 - iii. In certain cases where actual cost impact price variation exceeds the allowable threshold of ten (10%) such cases shall be brought to the respective approving forum.
 - iv. In case of any savings in the said provision, same should not be utilized for any other purpose.
 - v. Prior to substantial completion of the schemes, revised PC-I should be submitted to the respective forums by incorporating actual price variation for consideration / approval.
 - vi. The directions / conditions of original / amended / revised Administrative Approval of the scheme shall remain same.
 - vii. The executing agency shall ensure compliance of P&D Board's letter No.594/AC(Tech)/P&D/2022-23, pated 09.09.2022 in letter and spirit.





Board, Govt. of Punjab, 4th Floor, BOS Building, 65-Trade Center Block, Ayub Chowk, Johar Town, Lahore. Ph.: 042-99233176-92, Fax: 042-99233186, Email: info@dgmepunjab.gov.pk. Soft form of the report and corresponding MOM may be downloaded from www.dgmepunjab.gov.pk (December, 2021)