



NO: PCMU/SWAT/ 6412
Government of Sindh
Planning & Development Department
Directorate of Sindh Water Sector & Barrages
Improvement
(PCMU-SSU)

Karachi dated: 08th July, 2025

NOTE FOR CHAIRMAN P&DD, Go SINDH

SUBJECT: PROGRESS BULLETIN OF SINDH BARRAGES IMPROVEMENT PROJECT, PROJECT COORDINATION & MONITORING UNIT (PCMU), P&DD

PUC is the updated progress of the Sindh Barrages Improvement Project (Rehabilitation of Guddu Barrage Project & Rehabilitation of Sukkur Barrage Project), as of June 2025, for your perusal please.

**Nazeer Ahmed Memon
Project Coordinator**

Secretary Planning

Chairman, P&D

SBIP Project – Progress Bulletin - June 2025

Project Description: Sindh Irrigation Department's capacity to effectively rehabilitate, operate, and manage the Sukkur Barrage, as well as to improve the reliability and safety of the Guddu Barrage while enhancing the department's ability to operate and manage it.

Guddu	Signing Date 26-08-2015	Closing Date	22-12-2020	Extended Date:	22-12-2021
Sukkur	Signing Date 13-06-2018	Closing Date	30-06-2028	Extended Date:	30-09-2027

Executing Agencies/Project Implementing Units (PIUs):

Irrigation Department, Government of Sindh through Project Management Office (PMO), Sindh Barrages Improvement Project

Approved Cost (Million in PKR)		Guddu Barrage		Sukkur Barrage	
FPA (IDA):	68,349.94	29,494.60		38,855.34	
GOS (ADP):	6,268.40	1,840.80		4,427.25	
Total:	74,618.34	31,335.40		43,282.59	

	Actual Expenditure From 1st July, 2024 to 31st May, 2025			Expenditure From 1st June, 2025 to 30th June, 2025			BUDGET ESTIMATES 2024-25		
	FPA		GOS	FPA		GOS	FPA		GOS
SBIP	Through Assignment Account	Through Direct Payment		Through Assignment Account	Through Direct Payment		Through Assignment Account	Through Direct Payment	
PKR	4,479.322	3,967.146	0	921.845	240.018	267.220	12,108.600	4,207.165	1,161.06
US\$:	16.053	14.182	0	3.292	0.849	0	40.60	15.031	4.16

COMPONENT-WISE ACTIVITY PROGRESS

Component-A

1. Rehabilitation & Modernization of the Guddu Barrage.

Cost: 31,335.40 PKR Million

2. Rehabilitation and modernization of Sukkur Barrage and its Associated Structures.

Cost: PKR 43,282.59 PKR Million

- **Guddu Barrage:** Over all 73.22% physical progress and 68.65% financial progress achieved

SBIP/G2: Replacement of Main Barrage & Head Regulators Gates and Building Works:

Barrage works:

1. Gate Replacements

- 25 Nos. Canal Head Regulator Gates installed
- 10 Gates by M/s RONA installed
- 30 Gates (JHMC) FATs conducted
- 20 Gates in fabrication
- 28 Gates delivered, and 20 installed

2. Mechanical & Electrical Equipment:

- 10 Hoists & 2 motor Trollies by M/S Rona Makina Completed.
- FATs for 30 Hoists & 06 Motor Trolleys by JHMC conducted
- 14 Hoists under fabrication.
- 20 Hoists & 6 Motor Trollies delivered
- 20 Hoists installed.

3. Left Pocket Divide Wall and Cancellation of new divide wall on Bay 07

- Item deleted under VO-07.

4. Miscellaneous Items

- Generator house & furniture/fixtures completed; ongoing civil repair & maintenance.

5. Building Works and Fifth set of Bulkhead Gates

- Completed

6. Barrage Workshop

- Item moved in VO-14 is covered under VO-15.

7. Main Barrage Gate Material and Manufacture location

- Remaining in VO 13.
- **Physical Progress:** : 73.22%
- **Financial Progress:** 68.65%

SBIP/G3: River Training Works:

- **Physical Progress:** 100% Performance certificate issued, The Final Payment Certificate for the SBIP/G3 Contractor was issued by PIC on 20th August 2024.

SBIP/G3A: Construction of Right TJ Spur upstream of Guddu Barrage:

- Request for Bids has been published in Newspaper on 30th April, 2025.
- Pre-Bid Meeting held on 8th May, 2025.
- Bid Opening held on 29th May, 2025.
- BER is currently in progress.

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SBIP/S1: Restoration and Upgradation of Sukkur Barrage

General Requirements

- Mobilization ongoing; insurance accepted; E&SMP and HSE compliance in progress.

Diversion and Care of Water:

- Dismantling of the second-year cofferdam underway

Inspection and Repair Works

- **Main Barrage and Canal Head Regulators:** Visual inspections of both completed; civil repair and grouting of main Barrage ongoing.
- **Barrage Inspection:** Bathymetry/survey work completed; structural grouting and concreting underway.

Gate Replacement

- **Sukkur Barrage:** Trial Gate #36 installed; 18 gates fabricated; 16 sandblasted, painted, and installed with hoisting systems.
- **Canals:** Design and procurement of canal gate materials ongoing.

Workshop Equipment & Caisson Gates

- Caisson Gate shifted to Jetty from Gate Nr 36. re-shifted on left bank scour sluice gate.

Electric Work

- Load studies approved; transformers installed; control panel installation in progress.

Building works:

- SE and New Office Block finishing in progress.
- Masjid up to plinth; plinth beam work in Officer's Residences.
- **Physical Progress: 32.53%**
- **Financial Progress: 26.54 %**

Proposed Optimized Construction Strategy for Sukkur Barrage Gate Replacement (Gate No. 15–43)

The optimized strategy proposes replacing Gates 15–43 within one dry season (Oct 2025 – Jun 2026) in three zones (**Zone 1:** Gates 15–22 (8 Span of Tail) **Zone 2:** Gates 24–34 (11 Span of Main River Channel) **Zone 3:** Gates 35–44 (10 Span of Main River Canal) to reduce structural risk and expedite project benefits. The proposed strategy is under discussion.

Contractual Dispute (S1):

A critical issue has arisen in the S1 contract for the rehabilitation of Sukkur Barrage, stemming from the omission of a foreign currency price adjustment mechanism. This has led to an estimated overpayment of USD 3.75 million. The World Bank has flagged the matter as non-compliant, declared the overpaid amount ineligible for financing, and advised that it be recovered from the contractor and till then all payments to contract be suspended. To address this, a Dispute Avoidance and Adjudication Board (DAAB) is being established. While the client and contractor have agreed on two DAAB members, a disagreement over the nomination of the third member remains unresolved, delaying the full activation of the dispute resolution process.

Proposed Optimized Construction Strategy for Sukkur Barrage Gate Replacement (Gate No. 15–43)

The Proposal



Inspections during the January 2025 closure revealed significant structural deterioration in Gates No. 15–43 and their hoisting systems, including material degradation and fatigue damage. The original two-year replacement schedule of these gates prolongs exposure to safety risks, increasing the likelihood of gate failures during future flood seasons.



To mitigate these risks, the contractor proposes accelerating the works and completing all remaining river sluice gate replacements within one dry season (2025–2026)

Original Construction Plan

The original scheme proposed for the cofferdam divided into 3 phases:

Phase I (October 2024 – June 2025)

- Replacement of 16 river sluice gates on the left bank of the barrage (Gate Nos. 44 to 59)

Phase II (October 2025 – June 2026)

- Replacement of 15 river sluice gates on the right bank of the barrage (Gate Nos. 15 to 22 and 24 to 30)

Phase III (October 2026 – June 2027)

- Replacement of 12 river sluice gates in the central section of the barrage (Gate Nos. 31 to 43)

Why The Need For Adjustment

Ensure Completion on Time

- Completion Date already delayed for 4 months
- Reduce Exceptional events influence, like Terrorist Attacks and strike

Reduce failure risks

- Aging gates have caused multiple failures in recent years
- Gate 39 (2018) and Gate 33 (2019) suffered structural damage.
- In 2024, Gates 24–59 experienced widespread beam fractures;
- Gate 47 collapsed, triggering a state of emergency

Accelerate project functionality

- Achieve full irrigation functionality as early as possible
- Benefit the farmers of Sindh Province

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SBIP/S2: Dredging and excavation from left and right pockets, approach and tail channels of Sukkur Barrage

- World Bank NoL – Received
- Scope of S2 of merged within S1 contract
- Signing stage with CRBC-HBSZ and PMO
- Works will commence this year

SBIP/S3: Procurement of Dredgers:

- Review of potential suppliers is underway

SBIP/S4: Desilting of Rice Canal from RD 0 to RD 82.40.

- The SBIP/S4 contract is completed.

Summary Interpretation Table:

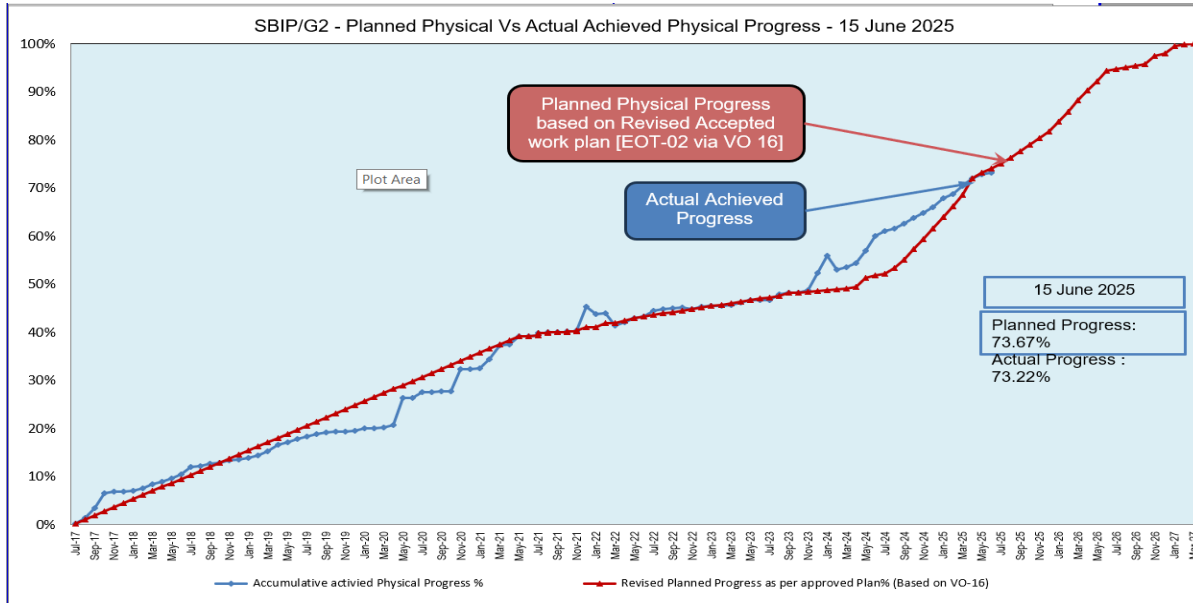
Contract	CPI	Interpretation	SPI	Interpretation
G2	> 1	Under Budget	< 1	Behind Schedule
S1	< 1	Over Budget	< 1	Behind Schedule
SBIP Overall	~1 or <1	Slightly Over Budget	< 1	Behind Schedule

<p align="center"><u>COMPONENT-B</u></p> <p>GUDDU: Improved Barrage Operation. Cost: PKR 232.00 M</p> <p>SUKKUR: Improved Barrage Operation. Cost: PKR 1336.00 M</p>	<p>PIC Support: Assisting PMO with emergency preparedness and sediment studies under Component B.</p> <p>Flow Monitoring: Calibration for Guddu canals ongoing; gauge wells for Sukkur and Kotri Completed (3 Right Bank Canals) (4 of left bank Canals will be completed in 2026 closure period) ; coordination with G2 Contractor planned for 2026.</p> <p>Sediment Management: SOP updated; training conducted; trial flushing at Sukkur not approved; 2024 sampling results under review.</p> <p>Barrage Safety: PoE reviewed designs, investigated gate failures, and provided feedback on ongoing works.</p> <p>Emergency Preparedness: Draft EPP updated; NGOs consulted on evacuation; DSS integration under discussion.</p> <p>BMU Updates: he BMU was on the agenda of 10th meeting of PSC-SBIP held on 27/5/2025 under the chairmanship of Chairman P&D Board. As the Secretary, Irrigation Department, was not present at the meeting, the Committee deferred the agenda item. It was directed that the matter be thoroughly discussed at the Departmental level in line with the Committee’s observations, and necessary action should be taken.</p>
<p align="center"><u>COMPONENT-C</u></p> <p>Technical Studies. Cost: PKR 936.40 Million</p>	<p>Sukkur Barrage Model Study:</p> <ul style="list-style-type: none"> • Shortlisting of firms is complete and submitted to the World Bank via STEP after committee approval. • Draft RFP prepared and shared with Committee members; also uploaded on STEP for review. • First visit to the physical model laboratory was in November 2024, followed by a second visit in April 2025. • The visits followed the workshop held on June 27, 2024, in Karachi. • Zero draft submitted and updated draft shared with SID for comments. • Physical and numerical models developed and calibrated using past flood data. • Workshop held on 30 July 2024 with senior irrigation officials; Artelia submitted a technical note. • Senior officials and PMO visited in April 2025 to review models and advise on further steps.
<p>River Basin Water Resources and Riverine Management Cost: PKR 250.00 Million</p>	<ul style="list-style-type: none"> • The original proposal expired in June 2023; a revised proposal of Rs. 179.847 million (FY 23–24 to 2026–27) is currently awaited. • Procurement for equipment worth Rs. 17.133 million was completed, but technical implementation is still pending. • Construction of the SWD building in Sukkur is delayed due to other ongoing works, with initiation now expected in July 2025.
<p align="center"><u>COMPONENT-E</u></p> <p>Project Management and Evaluation, Price Escalation and Physical Contingencies. Cost: 13,033.4 Million</p>	<ul style="list-style-type: none"> • Project Management (Ongoing) • Project Coordination & Monitoring Unit • Technical Assistance by UNFAO
<p align="center"><u>ISSUES/ACTION:</u></p>	<p><u>ISSUES/ ACTIONS:</u></p> <ul style="list-style-type: none"> • Security issues in surrounding area of Guddu and Sukkur Barrage • Slow Progress due to limiting movement of Chinese staff and Working Hours • Renewal of the proposal on conservation of Indus Dolphin • Resolve technical and contractual issues for Guddu and Sukkur gates, including SAT closure, embedded parts, and silt excluder responsibility. • Plan and manage extended closure impacts, including water supply for Rainee Canal and revised cofferdam design. • Advance institutional, legal, and asset actions, covering BMU staffing, DSS anchoring, legal opinions, and scrap gate disposal.

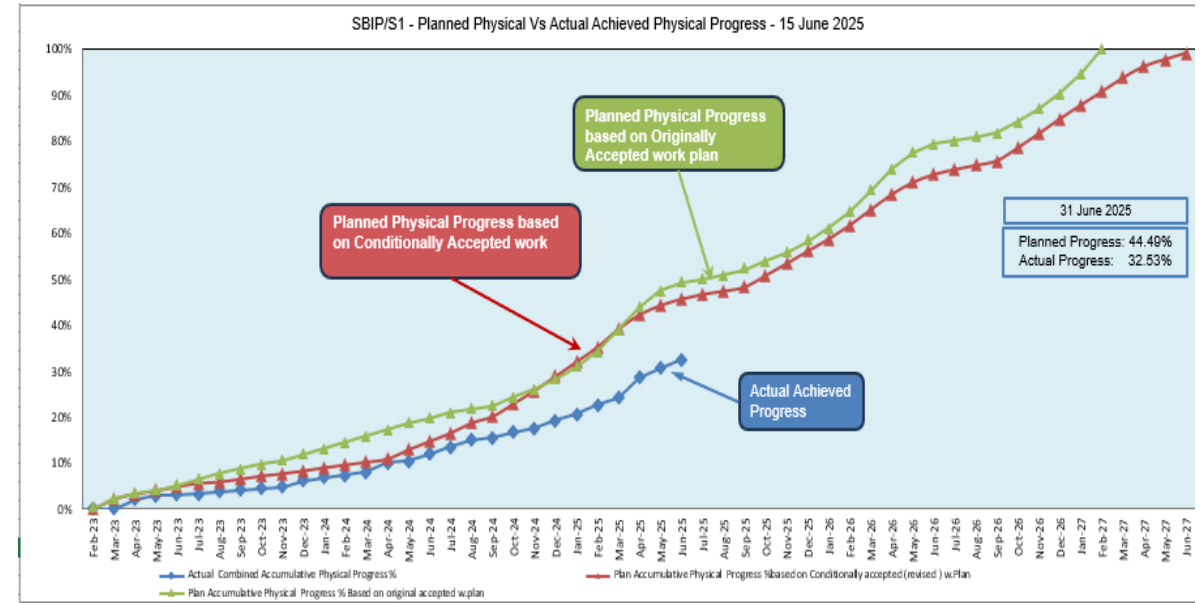
Schedule Performance Index & Cost Performance Index

Construction Packages	Original PC-1 (Cost Effect)		Component-A (Revised)	Engineer Estimate Cost	Total Cost (Awarded)	Cost in USD @ Rate PKR 280 / 1\$	Planned Start Date	Planned Finished Date	Planned %	Achieved % (Physical)	Financial Progress %	Planned Cost (PV)	Actual Cost (AC)					Earned Value (EV)	Schedule Performance Index (SPI)	Cost Performance Index (CPI)
	PKR (Million)	USD (Million) Rate: 280	PKR (Million)	PKR (Million)	PKR	USD Rate: 280						USD	PKR	PKR	PKR	PKR	PKR	USD		
SBIP/G2 Guddu	20,241.00	72.29	30,795.40	12,566	9,098,121,333	32,493,290	10-Jul-2017	31-Mar-2027	73.7%	73.2%	68.6%	23,937,807	6,661,735,421	5,920,408,110	891,420,018	765,570,701	9,243,422,053	23,791,912	0.99	1.00
SBIP/S1 Sukkur	16,662.50	59.51	28,035.14	21,886	17,815,873,600	63,628,120	24-Feb-2023	30-Jun-2027	44.2%	32.5%	26.5%	28,149,080	5,796,201,661	4,508,681,132	1,707,077,299	428,114,933	7,017,462,281	20,700,720	0.74	1.00
																			0.86	1.00

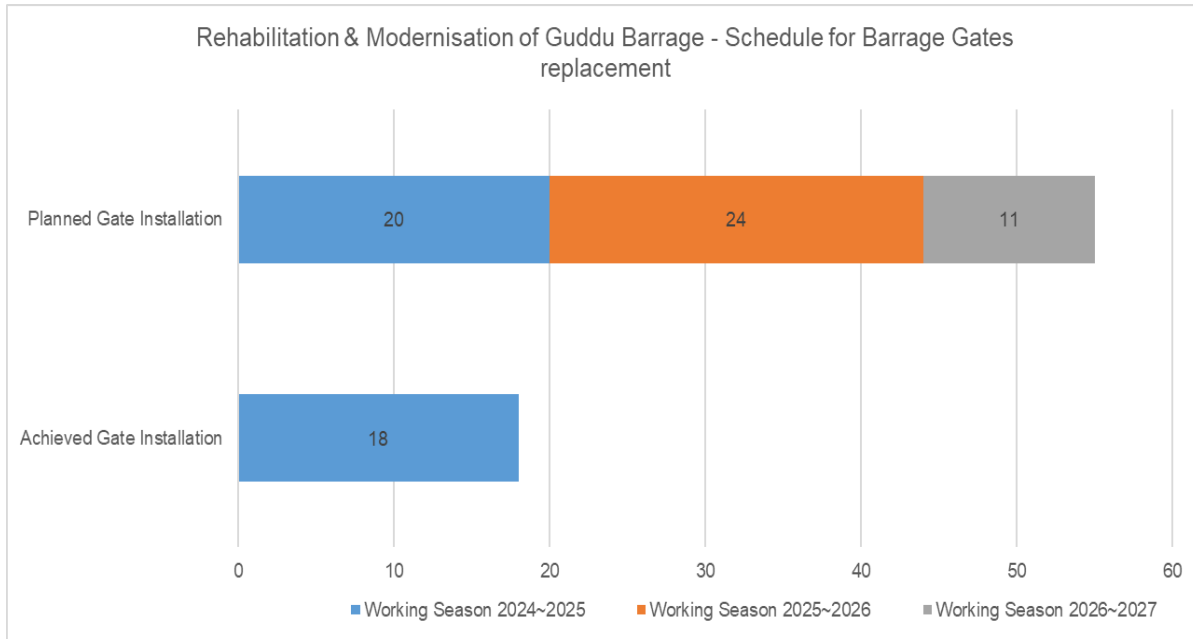
SBIP/G2 Actual Progress v/s Revised Work Plan



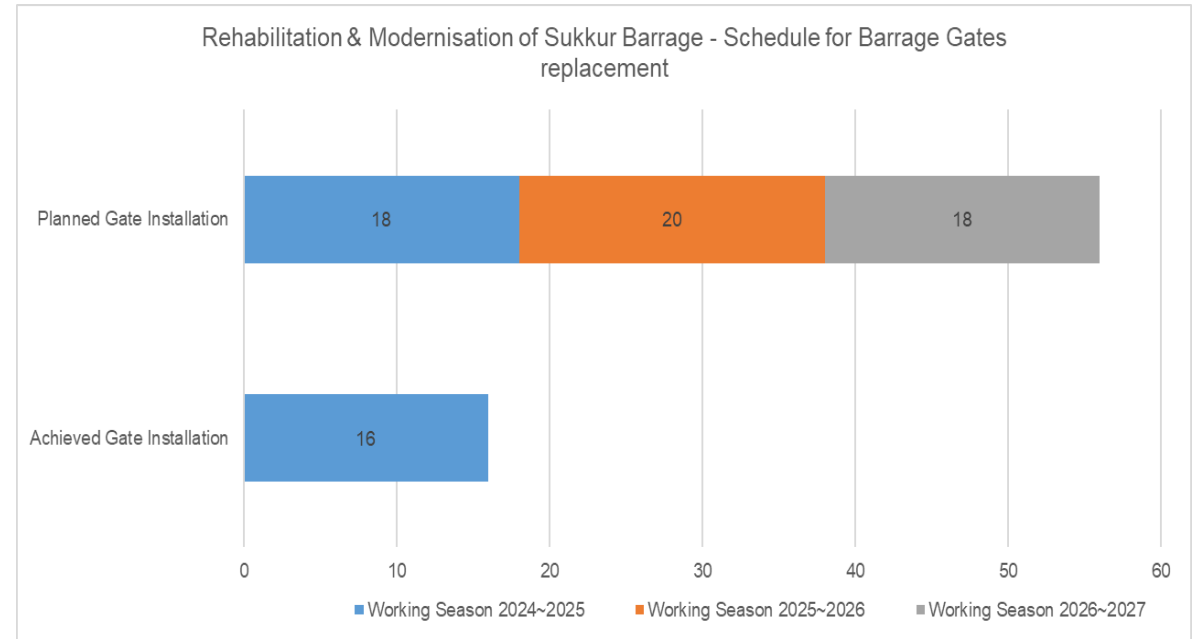
SBIP/S1 Actual Progress v/s Revised Work Plan



SCHEDULE FOR GUDDU BARRAGE GATE REPLACEMENT



SCHEDULE FOR SUKKUR BARRAGE GATE REPLACEMENT



PROGRESS REPORT ENDING 15 JUNE 2025

