



**PERFORMANCE AUDIT REPORT
ON
BALOCHISTAN EFFLUENT DISPOSAL
INTO RBOD (RBOD-III)
SUKKUR
AUDIT YEAR 2021-22**

AUDITOR GENERAL OF PAKISTAN

PREFACE

The Auditor General conducts audit under Articles 169 and 170 of the Constitution of the Islamic Republic of Pakistan, 1973 read with Sections 8 and 12 of the Auditor General's (Functions, Powers, Terms and Conditions of Service) Ordinance, 2001. The Performance Audit of Balochistan Effluent Disposal into RBOD (RBOD-III Project) was carried out accordingly.

The Directorate General Audit Water Resources conducted performance audit of the project during February and March, 2022 for the period up to June, 2021 with a view to report significant findings to the relevant stakeholders. Audit examined the economy, efficiency and effectiveness aspects of Balochistan Effluent Disposal into RBOD-III Project. In addition, Audit also assessed, on test check basis, whether the management complied with applicable laws, rules and regulations in managing the project. The Audit Report indicates specific actions that, if taken, will help the management realize the objectives of the project.

Audit observations have been finalized in the light of discussions held in meeting of Departmental Accounts Committee.

The Audit Report is submitted to the President of Pakistan in pursuance of Article 171 of the Constitution of the Islamic Republic of Pakistan, 1973 for causing it to be laid before both Houses of Majlis-e-Shoora [Parliament].

Islamabad
Dated: 05 DEC 2023

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(Muhammad Ajmal Gondal)
Auditor General of Pakistan

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Abbreviations and Acronyms

BoQ	Bill of Quantities
CCC	Central Contract Cell
Cft	Cubic Feet
C&M	Coordination and Monitoring
DAC	Departmental Accounts Committee
DLC	Defect Liability Certificate
ECC	Economic Coordination Committee
ECNEC	Executive Committee of the National Economic Council
EoT	Extension of Time
EPC	Escalation Payment Certificate
Etc	Et cetera
FIDIC	Federation International Des Ingenieurs-Conseils
GFR	General Financial Rules
GM	General Manager
GoB	Government of Balochistan
GoS	Government of Sindh
INTOSAI	International Organization of Supreme Audit Institutions
IPA	Interim Payment Application
IPC	Interim Payment Certificate
IPD	Irrigation and Power Department
JV	Joint Venture
Km	Kilometer
LD	Liquidated Damages

MKZP	Miro Khan Zero Point
MNVD	Main Nara Valley Drainage
MoU	Memorandum of Understanding
MoWR	Ministry of Water Resources
NICL	National Insurance Corporation Limited
O&M	Operation and Maintenance
PC	Planning Commission
PPRA	Public Procurement Regulatory Authority
PSDP	Public Sector Development Programme
PSR	Preliminary Survey Report
RBMP	Right Bank Master Plan
RBOD	Right Bank Outfall Drainage
RD	Reduce Distance
Rs.	Pakistani Rupees
WAPDA	Water and Power Development Authority

EXECUTIVE SUMMARY

The Directorate General Audit Water Resources conducted Performance Audit of Balochistan Effluent Disposal into RBOD (RBOD-III Project) WAPDA, Sukkur during February and March, 2022. The main objectives of the audit were to evaluate the economy, efficiency and effectiveness aspects of the project. Audit was conducted in accordance with International Organization of Supreme Audit Institutions (INTOSAI) Auditing Standards and the prevailing rules and regulations. Accordingly, the key audit findings are given below:

a. Key Audit Findings

- i. Delay in Handing/Taking over of completed works under RBOD-III Project to the Government of Sindh – Rs.6,604.843 million
- ii. Cost overrun of Rs.159.39 million with time overrun of 13 ½ years
- iii. Excess expenditure due to re-award of closed contract – Rs.278.175 million
- iv. Ineffective financial planning leading to delay in completion of project and increase in contract cost – Rs.246.871 million
- v. Loss due to rectification of flood damages and non-renewal of insurance policies by the contractor – Rs.62.171 million
- vi. Irregular execution of work without insurance coverage resulting in loss due to flood damages – Rs.31.600 million
- vii. Non-achievement of envisaged benefits as per original PC-I provisions

b. Recommendations

In view of the key audit findings, following measures are recommended to be taken by the management of WAPDA to improve project management practices;

- i. Project execution and award of contracts must only be initiated upon availability of funds as well as upon availability of unencumbered land in accordance with the guidelines of Manual for Development Projects;
- ii. Comprehensive mechanism must be developed for justifying as to why accept the bids having abnormally high rates than the engineer's estimate;

- iii. The project management team must ensure implementation of contract clauses relevant to insurance coverage of the project to cater for any risk associated with timely completion and maintenance of the project by the contractor;
- iv. Management needs to follow the mandatory provisions laid down in the Manual for Development Projects so that timely completion of projects can be ensured;
- v. It must be decided at planning stage that who will bear the O&M cost of completed works in case of delay in handing over of works to O&M agency, and
- vi. Handing / taking over of completed WAPDA project to the concerned provinces etc. must be carried out without any delay in compliance with PC-IV proforma of the Planning Commission.

1. INTRODUCTION

The Right Bank Master Plan (RBMP) for integrated development of the Right Bank of River Indus in Northern Sindh and Southern Balochistan was prepared in February, 1992 by M/s Mott MacDonald. Under this Plan, construction of Right Bank Outfall Drainage (RBOD) was recommended to be taken up for drainage effluent of existing and proposed drainage scheme of the right bank area.

The RBOD-III Project was an integral part of Right Bank Outfall Drainage System, which was planned as a mean of disposing-off saline effluent from Balochistan Province. Further, the project envisaged facilitating control of storm water drainage through existing and proposed drains and providing outfall facilities through RBOD-I and RBOD-II (outfall into sea in Gharo Creek) or partly into Hamal Lake during the periods when water quality permits so. The RBOD-I and RBOD-II projects are being constructed under separate projects by WAPDA and Army Engineers 5-Corps/IPD-GOS respectively. The Gross Command Area to be benefited under the Project was 0.709 million acres and major part of the project area lied on the Right Bank of Indus River within the districts of Nasirabad and Jaffarabad of Balochistan. General Manager (Projects) South WAPDA is administering the project.

The Project was approved by the Executive Committee of the National Economic Council (ECNEC) on January 07, 2004 with a cost of Rs.4,485.200 million which was revised on July 07, 2017 to Rs.10,804.540 million without any foreign component. The consultancy contract was awarded to a joint venture of National Development Consultants, Barqaab Consulting Services and Engineering and Agriculture Services Entity. The completion of the project was scheduled within two years by December, 2005 but it could not be completed within the scheduled period due to financial constraints and termination of three contracts by the project management. The mismanagement by the Project Authorities resulted in delay in completion of the project resultantly caused delay in reaping the envisaged benefits.

The components of the project, as per original PC-I were as under:

- Construction of Hairdin Outfall Carrier Drain

- Construction of Surface Drains of Usta Muhammad Scheme, a sub project of master plan of RBOD
- Construction of RBOD from Miro Khan Zero Point to Hairdin Pump Station
- Remodeling of Main Nara Valley Drainage (MNVD)
- Widening of MNVD to accommodate additional effluent
- Extension of Carrier/outfall drain for 6 Km North of Chukhi
- Construction of Irrigation Channel for re-utilization of 400 cusecs of Balochistan effluent from Drain RD 29 Km to Chitti River

The following Components were excluded in the Revised PC-I:

- Remodeling of Main Nara Valley Drainage (MNVD)
- Widening of MNVD to accommodate additional effluent
- Extension of Carrier/outfall drain for 6 Km North of Chukhi

i. Responsible Authorities

- Controlling Ministry Ministry of Water Resources, Government of Pakistan, previously known as (Ministry of Water & Power, Government of Pakistan)
- Execution Department Water and Power Development Authority (WAPDA)
- Operation & Maintenance (O&M) Agency Irrigation and Power Departments (IPD) Government of Sindh and Baluchistan

ii. Project Details

Type of Project

Development project for providing outfall facilities to the existing and proposed drainage System.

Objectives of the Project

- a. To facilitate disposing of saline effluent of Pat Feeder / Kherther Canal Command area in Balochistan through existing and proposed drains.

- b. To facilitate control of storm water drainage through existing and proposed Drains in Balochistan and Sindh.
- c. To reclaim the agriculture land converted into ponds of water due to lack of disposal of storm water to increase agriculture production.
- d. To facilitate re-use of suitable water for irrigation and conservation of Hamal and Manchar Lakes and thereby improving their environmental condition.

Beneficiaries

People of Balochistan and Sindh Province.

Time Phasing

Completion of works and implementation of Project up to December 30, 2005 as per original PC-I and November, 2019 as per First Revised PC-I which was extended up to June 30, 2021.

Capital Cost

(Amount Rs. in million)

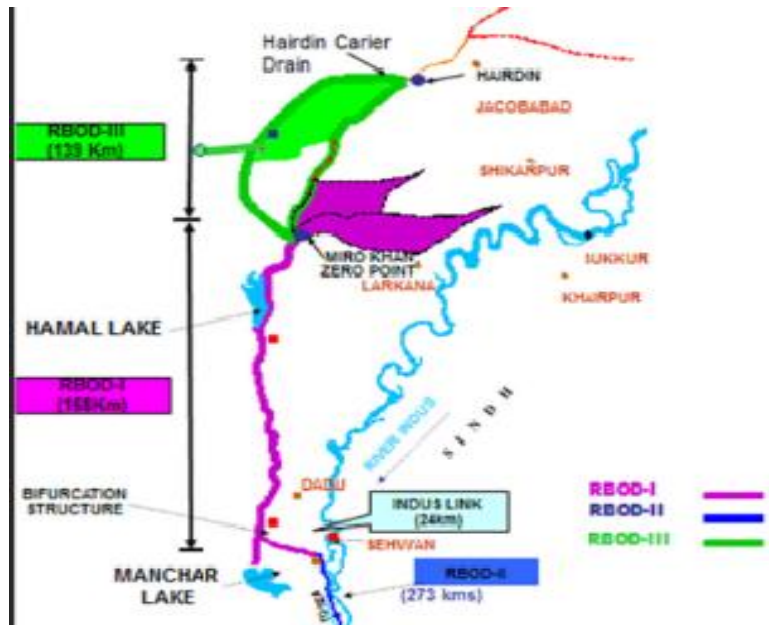
PC-I	Date of approval	Amount
Original	January 07, 2004	4,485.200
Revised	July 26, 2017	10,804.540

Source of Finance

Government of Pakistan

Type of Finance

Original as well as revised PC-I was approved without any foreign exchange component.



2. AUDIT OBJECTIVES

The main audit objectives were to evaluate:

- the issues and bottlenecks which affected the timely completion of the project;
- the adequacy of planning and monitoring arrangements for completion of the project on the basis of 3Es (economy, efficiency and effectiveness);
- the maintenance of accounts in financial management of PSDP;
- the major factors underlying cost and time overrun in the project and its impact on project development and to suggest remedial measures for effective project management practices.

3. AUDIT SCOPE AND METHODOLOGY

3.1 Audit Scope

Audit period, covered for performance audit was up to June, 2021. During this period, total expenditure of Rs.10,963.933 million was incurred by the project management. The auditable record was available in the office of Project Director, Right Bank Outfall Drainage-III (RBOD-III) Project, Sukkur.

3.2 Audit Methodology

The audit work was initiated by formulating detailed Preliminary Survey Report (PSR) and development of audit plan. **Result oriented** approach has been adopted for this performance audit. Following audit methodology was adopted during the course of performance audit:

- i. Discussions with Project Management team
- ii. Examination of samples selected from record / documents of the project
- iii. Review of original and 1st revised PC-I of the project
- iv. Review of contract agreements
- v. Review of consultancy services agreement
- vi. Review of bid evaluation reports
- vii. Minutes of Authority Meetings
- viii. Review of Interim Payment Certificates (IPCs) and Measurement Books
- ix. Variation Orders
- x. Examination of the progress report of the project
- xi. Site visits.

4. AUDIT FINDINGS AND RECOMMENDATIONS

4.1 Organization and Management

Organization and management involve bringing people together to work towards a common goal, utilizing resources efficiently, and coordinating activities for successful project completion and desired benefits.

During the implementation phase of RBOD-III project, works of worth Rs.10,804.440 million were completed and Balochistan Province part of the project was handed over to the Provincial Government of Balochistan; however, Sindh Province part could not be handed over to the Provincial Government of Sindh till date.

This aspect of management failure is explained in detail below where there was lack of efficiency and coordination. Similarly, an advance was given to the Pakistan Railways Department, neither the work was performed nor the advance was recovered from the department. Non-recovery of advance from Pakistan Railways Department had affected the financial position of the project.

4.1.1 Delay in Handing/Taking over of completed works to Government of Sindh – Rs.6,604.843 million

According to Section-3 (ii & iii) of PC-I, approved by the ECNEC on July 26, 2004, WAPDA will be the executing agency and O&M of the project will be responsibility of the Irrigation and Power Departments of the Government of Sindh and Balochistan.

During Performance Audit of RBOD-III Project Sukkur, it was observed that different works under different contracts costing Rs.10,804.440 million were completed from time to time up to June 21, 2020. Completed works pertaining to the Balochistan Province amounting to Rs.4,343.506 million were handed over to the GoB with cost share of Rs.1,990.556 million however the remaining balance of Rs.2,352.950 million was not transferred to GoB. Similarly, the completed works pertaining to the Sindh Province worth Rs.6,460.940 million were also not taken over by Government of Sindh (GoS) since 2013 despite repeated pursuance by WAPDA. However, cost share amounting to Rs.4,281.742 million was transferred to GoS but the balance share of Rs.2,179.198 was not transferred to GoS. As a result of non-handing over of the completed works, WAPDA had to

bear an amount of Rs.143.903 million on account of O&M cost up to December 31, 2022, this has led to inefficiency of resources. (**Annex-1**)

This resulted in delay in handing over of completed works of Rs.6,460.940 million to Government of Sindh and non-recovery of O&M cost borne by WAPDA amounting to Rs.143.903 million.

The matter was taken up with the management in March, 2022 and reported to MoWR in April, 2022. The management replied that after completion of project works, the matter was taken up with Provincial Governments. All efforts were underway to hand over the works to Irrigation Department, GoS.

The DAC in its meeting held on October 26, 2022 directed the management to submit a proper case (containing detailed justification and O&M cost incurred so far) to MoWR in order to take up the matter with ECNEC.

Further progress was not intimated till finalization of the report.

Audit recommends the management to justify the inefficiency and delay in non-handing over of the completed works to GoS besides implementing DAC's decision.

(Original Para No.4.4.2)

4.1.2 Non-recovery of advance payment for deposit work – Rs.50.00 million

As per Clause-9.2.2 of the WAPDA Accounting and Financial Reporting Manual, the GM Finance of each wing shall be responsible for the enforcement of procedures governing the cash management, maintenance of the records, appropriate usage, accounting for advances and deposits and performing periodic reviews of procedures being followed.

During Performance Audit of RBOD-III Project Sukkur, it was noticed that an advance payment of Rs.50.00 million was made to Pakistan Railways, Sukkur on June 28, 2005 and June 27, 2006 for carrying out deposit work for railway line crossing of RBOD extension without timeframe and terms and conditions for execution of said work. However, neither the deposit work was carried out by Pakistan Railways nor the department refunded the amount. The said work was executed by WAPDA through another contract during 2020 at a cost of Rs.43.841 million.

Due to such inefficiency and lack of coordination, has resulted in non-recovery of advance payment of Rs.50.00 million despite lapse of 15 years.

The matter was taken up with the management in March, 2022 and reported to MoWR in April, 2022. The management replied that vigorous efforts had been made for refund of the deposited amount. Railway Department had also demanded funds from Head Office. Any further progress would be intimated accordingly.

The reply was not tenable since even after 15 years since there was no outcome.

The DAC in its meeting held on October 26, 2022 directed the management to send a reference within thirty (30) days to MoWR for taking up the matter with Ministry of Railways.

Further progress was not intimated till finalization of the report.

Audit recommends implementation of DAC directives / decision without further delay.

(Original Para No.4.3.8)

4.2 Financial Management

Financial management involves strategic planning, organization, direction, and control of financial undertakings during project planning and execution. It ensures sufficient funds availability and optimal utilization, crucial for successful project implementation and timely achievement of goals.

Poor internal controls led to improper financial management in RBOD-III Project, causing delayed completion and increased project costs. This has shown the lack in economy and efficiency on behalf of management. WAPDA closed contracts due to non-fund availability, weak internal controls, undue benefits, and price escalation, resulting in contractor overpayment and non-imposition of liquidated damages penalties.

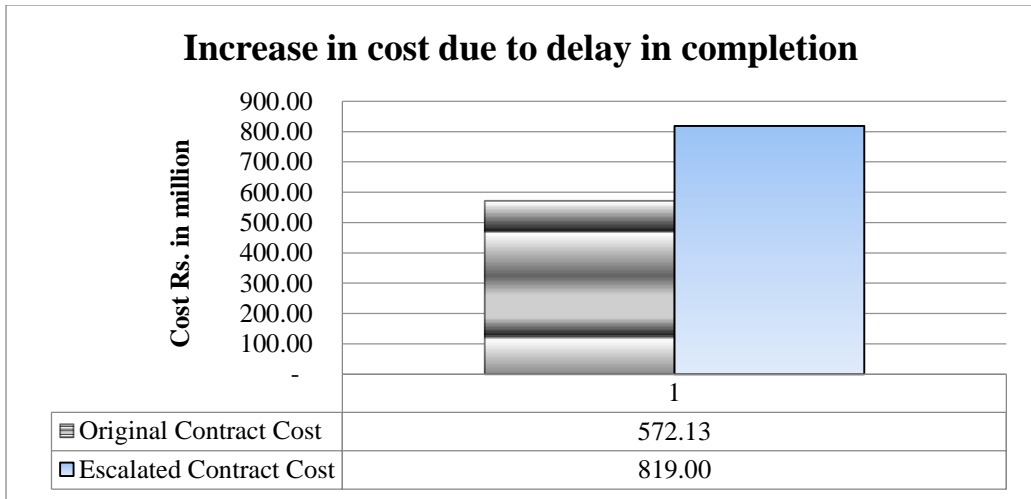
4.2.1 Ineffective financial planning leading to delay in completion of project and increase in contract cost – Rs.246.871 million

As per para-9.2 of the Manual for Development Projects of the Planning Division, Government of Pakistan, the implementing agency is the entity charged with the responsibility of successful completion of the project's components

including completion of all studies; preparation of plans, specifications, and estimates; the acquisition of land, rights-of-way etc.; procurement of goods and services; construction; project management; engineering, including surveys and inspection, etc. There could be a different implementing agency for each component of a project. To ensure clear lines of responsibility, only one agency can be the implementing agency for a single component. This agency is responsible for ensuring the adequacy of its products through a quality control and quality assurance procedure.

During Performance Audit of RBOD-III Project Sukkur, it was noticed that a contract No. R-III (f)-Construction of irrigation channel for reutilization of 400 cusec of Baluchistan effluent from Drain RD 29 km to Chitti River- was awarded to M/s Muhammad Ayub and Brothers on May 17, 2006 at bid cost of Rs.572.135 million with stipulated completion date of November 19, 2008. The works of the contract could not be completed within stipulated period and 1st Extension of Time (EoT) was granted up to August 31, 2009. Due to non-payment of certified claims, the contractor had suspended the works. Resultantly, a Memorandum of Understanding (MoU) was signed with the contractor for release of 50% Performance Guarantee and retention money. The same was approved by Authority vide letter dated August 10, 2011 and completion date was extended up to December 31, 2011. However, due to delay in clearance of pending liabilities, Authority vide letter dated June 18, 2012 granted 3rd EoT up to July 06, 2012. However, once again due to financial constraints, the contractor had applied for further extension and 4th extension of 1912 days up to September 30, 2017 was granted by WAPDA. Due to delay of more than 108 months in completion of the project, the contract cost increased from Rs.572.135 million to Rs.904.826 million. However, as per handing/taking over protocols, the project consultants suggested to clear the pending liabilities of Rs.17.530 million to start the work but the same was not done. Due to ineffective financial planning, the management had to bear extra contract cost of Rs.246.871 million. (**Annex-2**)

Audit held that if normal escalation of 15% is allowed, even then, the net increase in contract cost was Rs.246.871 million (43% higher of the original contract cost) out of which 30% increase was due to price escalation.



The matter was taken up with the management in March, 2022 and reported to MoWR in April, 2022. The management replied that gross amount of Rs.255 million for escalation as per contract provision was also included in the contract cost by Audit which was booked under separate head in the PC-I.

The management's reply was not satisfactory as due to inefficiency resulted in considerable increase in cost and delay in completion of the project

The DAC in its meeting held on October 26, 2022 directed the management to submit revised reply containing the reason for delay in completion of project, chronological narration of facts causing constraints, less release of PSDP funds and status of approval of PC-I to Audit.

Further progress was not intimated till finalization of the report.

Audit recommends the management to implement DAC's decision.

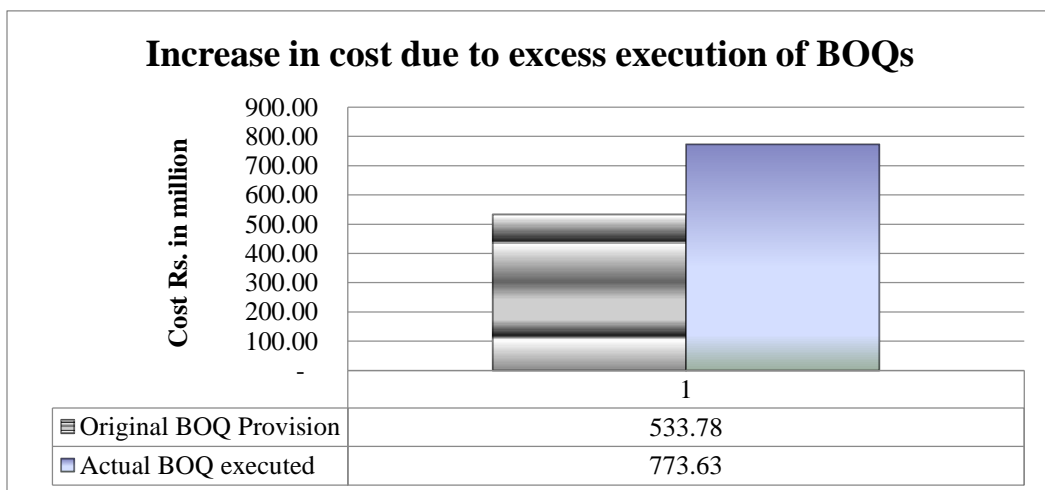
(Original Para No.4.3.5)

4.2.2 Abnormal delay in execution of contracts causing increase in rates, costs and re-award thereof – Rs.239.851 million

As per para-9.2 of the Manual for Development Projects of the Planning Division, Government of Pakistan, the implementing agency is the entity charged with the responsibility of successful completion of the project's components including completion of all studies; preparation of plans, specifications, and estimates; the acquisition of land, rights-of-way etc.; procurement of goods and

services; construction; project management; engineering, including surveys and inspection, etc. There could be a different implementing agency for each component of a project. To ensure clear lines of responsibility, only one agency can be the implementing agency for a single component. This agency is responsible for ensuring the adequacy of its products through a quality control and quality assurance procedure.

During Performance Audit of RBOD-III Project Sukkur, it was noticed that two contracts R-III (d/1)-Construction of new surface drainage system for Usta Muhammad Drainage Unit Hadero Branch Drain-Sub Unit and R-III (d/2)-Construction of new surface drainage system for Usta Muhammad Drainage Unit Usta Muhammad Main Drain-Sub Unit- were awarded on August 25, 2006 and January 31, 2007 at a cost of Rs.535.636 million and Rs.279.269 million respectively. After completion of 37.5% and 60% works, respectively, the contracts were closed by the Authority due to non-availability of funds. Later on, these closed contracts for the balance works were awarded to M/s Tameer Associates-Hassas Joint Venture (JV) on April 25, 2019 and March 29, 2019 at a cost of Rs.504.621 million and Rs.324.848 million and completed on June 21, 2020 and June 15, 2020 with a delay of 132 months and 108 months respectively. It was further revealed that BoQs costing Rs.773.634 million were executed against the original BoQs of Rs.533.783 million which resulted in increase in cost up to Rs.239.851 million against these contracts due to change in BoQ rates besides abnormal delay in completion of re-awarded contracts. **(Annex-3).**



Audit held that award of contracts without availability of funds and execution of BoQ items at higher rates after re-award of closed contracts and delay in completion of re-awarded contracts was unjustified for which responsibility needed to be fixed.

This resulted in abnormal delay in execution of contracts causing increase in rates, costs of Rs.239.851 million and re-award thereof showed lack of economy and efficiency.

The matter was taken up with the management in March, 2022 and reported to MoWR in April, 2022. The management replied that the contracts under observation commenced in December, 2006 & February, 2007 which could not be completed due to financial constraints and due to floods of 2007 & 2010; re-alignment issues and delay in approval of revised PC-I. The delay in completion of the project works were considered by the competent forum and ECNEC approved the latest revised PC-I elaborating all the delays.

The DAC in its meeting held on October 26, 2022 directed the management to submit detailed revised reply along with proper justification duly supported by documentary evidence to Audit.

Further progress was not intimated till finalization of the report.

Audit recommends the management to justify the matter of award and closure of contracts due to non-availability of funds and resultant increase in rates/cost besides implementing the DAC's decision.

(Original Para No.4.3.7)

4.2.3 Undue favour to contractor by not imposing liquidated damages – Rs.127.604 million

As per Clause-47.1 of the particular conditions of the contract agreement, the liquidated damages for each day of delay in completion of the whole of the works, or if applicable any section, shall be as given in Appendix to Tender, subject to a maximum of ten percent (10%) of the contract price stated in the letter of acceptance.

During Performance Audit of RBOD-III Project Sukkur, it was noticed that a contract No. R-III (b)-Construction of RBOD Extension from Miro Khan Zero

Point to Haidin Pump Station- was awarded to M/s Khyber Grace Pvt Ltd on February 17, 2006 at a bid cost of Rs.1,276.041 million to be completed on July 23, 2009. The work was not completed within the stipulated period and 365 days extension was granted with revised completion date as June 23, 2010. The contractor issued suspension notice and suspended the work with effect from September 07, 2009 due to non-payment of pending liabilities by WAPDA. After partial payment of contractor's claims, the contractor resumed the work on April 01, 2010 but could not complete the work within the extended time up to June 23, 2010. Resultantly, the contractor requested for extension of 191 days which was regretted by the Authority. However, the contract was closed at 82% completion due to pending claims of Rs.81.144 million of the contractor on May 24, 2011. After closing of the said contract, the incomplete works of different contracts amounting to Rs.131.164 million, including part of the remaining work- Construction of Complex Structures- of the closed contract R-III (b) costing Rs.80.296 million was reassigned to the same contractor M/s Khyber Grace Pvt. Ltd. under Contract No.R-III (b-i) through Variation Order No.1.

Audit held that non-clearance of liabilities of the contractor for Rs.81.144 million was not the actual reason of closure of the contract. The funds could have easily been arranged by WAPDA's own sources through bridge financing. Instead the purpose was to just avoid imposition of liquidated damages as the contractor was engaged in three other different contracts No.R-III (b), R-III (b/I) and R-III (c) at the same time and could not complete the said work even within the extended time. Hence, liquidated damages @ 10% of the contract price amounting to Rs.127.604 million were required to be imposed upon the contractor but the same was not done.

Non-adherence to provisions of contract agreement resulted in undue favour to contractor by not imposing liquidated damages of Rs.127.604 million.

The matter was taken up with the management in March, 2022 and reported to MoWR in April, 2022. The management replied that all necessary and essential work required for better performance of the project were carried out to achieve intended benefits and to save lives and infrastructure in the project area.

The management's reply was not tenable as the contractor was engaged in other contracts of the same project and LD was required to be imposed by the employer.

The DAC in its meeting held on October 26, 2022 directed the management to submit detailed revised reply with proper justification and documentary evidence to Audit.

Further progress was not intimated till finalization of the report.

Audit recommends the management to justify non-imposition of liquidated damages upon the contractor and provide documentary evidence with reference to non-availability of funds at the time of suspension of original contract.

(Original Para No.4.3.4)

4.2.4 Irregular payment due to excess certification of escalation claims – Rs.19.389 million

As per General Financial Rules (GFR) Rule-10, Every officer, incurring or authorizing expenditure from public funds, should be guided by high standards of financial propriety among the principles on which emphasis is generally laid that every public officer is expected to exercise the same vigilance in respect of expenditure incurred from public moneys as a person of ordinary prudence would exercise in respect of expenditure of his own money.

During Performance Audit of RBOD-III Project Sukkur, it was noticed that escalation charges amounting to Rs.106.971 million including pending liabilities of Rs.12.888 million was paid to M/s Khyber Grace Pvt. Ltd. under Contract No.R-III (b)-Construction of RBOD Extension from Miro Khan Zero Point to Haidin Pump Station up to December 31, 2010. The said total amount was exactly tallied with the summary sheet of the paid escalation under EPC No.29. However, as per handing/taking over protocols, total escalation paid on work executed up to June 23, 2010 was Rs.126.360 million. Hence, escalated price to the tune of Rs.19.389 million (Rs.126.360 million – Rs.106.971 million) was paid in excess prior to signing of the handing/taking over protocol which was required to be recovered from the contractor.

This resulted in irregular payment of Rs.19.389 million due to excess certification of escalation claim.

The matter was taken up with the management in March, 2022 and reported to MoWR in April, 2022. The management replied that an amount of Rs.10.859 million was paid as escalation / price adjustment under the contract provisions

against certified / verified IPC-30 in terms of agreed conditions of MoU, hence, no unjustified payment was made.

The DAC in its meeting held on October 26, 2022 directed the management to conduct a fact-finding enquiry under supervision of Member (Water) with representatives of GM (M&S), GM (C&M) Water and GM (CCC) and submit report within one month.

Further progress was not intimated till finalization of the report.

Audit recommends the management to implement DAC's decision.

(Original Para No.4.3.6)

4.3 Procurement and Contract Management

Contract management involves initiation, execution, termination, renewal, and risk mitigation, involving contract drafting, negotiation, performance analysis, and reputational risk mitigation.

The Ministry of Planning emphasizes the importance of a scientific approach for successful project management, ensuring timely, scope, and quality execution for desired results. Approved agency must implement project in accordance with PC-I provisions, cannot modify parameters, and cannot spend beyond project scope and cost. It would be considered as illegitimate expenditure.

Pakistan's Planning Division mandates tendering agency to verify cost estimates based on market surveys and pre tender quotations. However, the contract was awarded at exorbitantly high rates than the engineer's estimate, violating the PPRA Rules. Besides, in Contract R-III(b), the contractor had suspended the work without completion and remaining works were awarded at higher rates than the remaining provision in this work. Contractual mismanagement involved non-obtaining insurance policies, leading to flood damages and unresolved claims in project works resulting in lack of economy and efficiency.

4.3.1 Irregular award of contract to single bidder without rate analysis in violation of PPRA Rules – Rs.535.636 million

As per Para-6.12 of the Manual for Development Projects of the Planning Division, Government of Pakistan, cost estimates should be based on present market surveys and pre-tender quotations. The schedule of rates used in estimating

the project cost should be regularly updated by taking into account the market rates, instead of allowing across-the-board premium on the schedule of rates. Further, as per clarification of the PPRA, whenever a procuring agency is confronted with such a situation whereby the rate quoted by the single bidder cannot be compared so as to declare it as the lowest rate or otherwise it may make a prudent decision.

During Performance Audit of RBOD-III Project Sukkur, it was noticed from the Bid Evaluation Report that bids were invited from pre-qualified firms for the work, “Construction of New Surface Drainage System for Usta Muhammad Drainage System Unit – Hadero Branch Drain-Sub Unit”. Only one bidder M/s Ayub and Brothers submitted bid. The bid price was negotiated with bidder and after 7.25% rebate on all items (Bill 2 to 8) and further reduction of rate of 2% on item No.101, the bid price was finalized at Rs.535.636 million (34.90% higher than the Engineer’s estimate of Rs.397.046 million) and the work was awarded to M/s Ayub & Brothers under contract No.R-III (d/I). It may be noted that the negotiation with the contractor was not allowed under PPRA Rules (Rule-31(1)). Detailed analysis of bid prices and Engineer’s estimate revealed that prices of many items in the bid were abnormally high ranging from 148% to 4,248% (Estimated rate = Rs.23, BOQ Rate = Rs.1,000, Percentage above = $((1,000-23)/23 * 100 = 4247.82\%)$ in respect of items No. 304, 104, 105 and 101 respectively than the Engineer’s estimate. After completion of 37% physical progress, the contractor issued notice of suspension of work due to delayed payments of certified claims and finally the contract was closed. It was further observed that the items having higher bid price ranging from 50% to 334% than the Engineer’s estimate were executed and Rs.173.785 million paid which was 93% of the total value of work done i.e. Rs.187.659 million despite the overall physical progress of 37% only which was an undue favour extended to the contractor.

Audit found contract award without rate analysis, execution of higher bid items, and payment exceeding BoQ provision which is irregular and showed lack of economy while managing resources. This resulted in irregular award of contract amounting to Rs.535.636 million to a single bidder.

The matter was taken up with the management in March, 2022 and reported to MoWR in April, 2022. The management replied that the changes in design /

increased in quantities and expenditure incurred were regularized in 1st revised PC-I.

The management's reply was not tenable because the contract was awarded on single bid basis without rate analysis / detailed comparison with other contracts.

The DAC in its meeting held on October 26, 2022 directed the management to submit revised reply with proper justification for bid award and provide documentary evidence.

Further progress was not intimated till finalization of the report.

Audit recommends the management to justify the award of contract to single bidder without rate analysis besides implementing DAC's decision.

(Original Para No.4.2.2)

4.3.2 Irregular/excess expenditure due to re-award of closed contract – Rs.278.175 million

As per Para-9.2 of the Manual for Development Projects of the Planning Division, Government of Pakistan, "The implementing agency is the entity charged with the responsibility of successful completion of the project's components including completion of all studies; preparation of plans, specifications, and estimates; the acquisition of land, rights-of-way etc.; procurement of goods and services; construction; project management; engineering, including surveys and inspection, etc. There could be a different implementing agency for each component of a project. To ensure clear lines of responsibility, only one agency can be the implementing agency for a single component. This agency is responsible for ensuring the adequacy of its products through a quality control and quality assurance procedure.

During Performance Audit of RBOD-III Project Sukkur, it was noticed that a contract No. R-III (b)-Construction of RBOD Extension from Miro Khan Zero Point to Haidin Pump Station- was awarded to M/s Khyber Grace Pvt Ltd on February 17, 2006 at a bid cost of Rs.1,276.041 million to be completed on July 23, 2009. The work was not completed within the stipulated period and 365 days extension was granted with revised completion date of June 23, 2010. The contractor issued suspension notice due to non-payment of pending liabilities by WAPDA and suspended the work w.e.f. September 07, 2009. After 82% completion, the contract was closed. Detailed scrutiny of last paid IPCs and BoQs

revealed that total BoQ provision was Rs.815.076 million in the original contract against which BoQs executed and paid were Rs.660.517 million and the remaining BoQ provision was of just Rs.154.559 million. However, the partial balance work was awarded to M/s Ramzan & Sons under Contract No.R-III (B-3) which was completed on July 16, 2019 at a cost of Rs.432.734 million.

Audit held that there was BoQ provision of Rs.154.559 million only for the remaining work and expenditure of Rs.432.734 million was incurred against it. Thus, incurrence of expenditure of Rs.278.175 million (**Annex-4**) in excess of BoQ provision was irregular for which responsibility needed to be fixed. Moreover, a delay of more than 119 months also occurred due to improper planning for which responsibility needed to be fixed.

This resulted in irregular / excess expenditure of Rs.278.175 million due to re-award of closed contract.

The matter was taken up with the management in March, 2022 and reported to MoWR in April, 2022. The management replied that competent forum approved the 1st revised PC-I in 2017 after resolving re-alignment issues in 2016. Accordingly, the tender process for balance work was initiated and work was awarded in 2018 which was completed within the stipulated time. The completed works were under process for handing /taking over with Government of Sindh for further O&M.

The DAC in its meeting held on October 26, 2022 directed the management to submit detailed revised reply with proper justification and documentary evidence to Audit.

Further progress was not intimated till finalization of the report.

Audit recommends the management to justify the increase in quantities of BoQ item of closed contract in the light of DAC's decision.

(Original Para No.4.3.2)

4.3.3 Loss due to rectification of flood damages and non-renewal of insurance policies by the contractor – Rs.62.171 million

As per Clause-21, 23, 24 and 25 of the General Conditions read with Clause-25.5 of Particular Conditions of the contract agreement, the contractor

was required to place all insurances relating to the contract with the National Insurance Corporation Ltd (NICL), for the full replacement cost of the work plus an additional sum of 15 percent of such replacement to cover any additional cost of and incidental to the rectification of loss or damage including professional fees and the cost of demolishing and removing any part of the work and removing debris of whatever nature and the Contractor's Equipment and other things brought on to the site by the contractor for a sum sufficient to provide for their replacement at the site. The policies should be effective from the start of work at the site until the date of issue of the relevant Taking-Over Certificate in respect of the works or any section or part thereof as the case may be, and during the Defects Liability Period.

During Performance Audit of RBOD-III Project Sukkur, it was noticed that a contract No. R-III (c) for Construction of Hairdin Carrier Drain Extension from Chukhi to MKZP and 6 Km North of Chukhi was awarded to M/s Khyber Grace Pvt. Ltd on March 25, 2006 at a cost of Rs.439.695 million to be completed on September 24, 2007 which was further extended up to September 24, 2009. A work component "Gated Structures" was not completed within the extended completion period and was included in the punch list items. Taking Over Certificate/Substantial Completion Certificate was issued w.e.f. September 24, 2009. Due to delay in clearance of punch list items, Defect Liability Certificate (DLC) was issued w.e.f. May 24, 2011 without extended insurance policies up to the final DLC as the insurance policy expired on September 24, 2009. Meanwhile, heavy flood occurred on August 19, 2010 and ongoing works were damaged. The damaged works were rectified by the contractor at a cost of Rs.51.671 million under another contract to be borne by the employer due to expiry of insurance coverage despite payment of Rs.10.500 million as insurance premium to the contractor.

Non-fulfilment of contractual obligations resulted in loss of Rs.62.171 million due to rectification of flood damages and non-renewal of insurance policies by the contractor.

The matter was taken up with the management in March, 2022 and reported to MoWR in April, 2022. The management replied that due to funds constraints, the certified payments amounting to Rs.52.00 million were not paid to the

contractor resulting in suspension of work including punch list items. Efforts were made by the management for arranging funds but could not bear fruit.

The DAC in its meeting held on October 26, 2022 directed the management to submit comprehensive reply with reference to relevant clause of FIDIC with proper justification and documentary evidence.

Further progress was not intimated till finalization of the report.

Audit recommends the management to justify non-obtaining of insurance coverage and non-rectification of work at the risk & cost of the contractor besides implementing the DAC's decision.

(Original Para No.4.1.8)

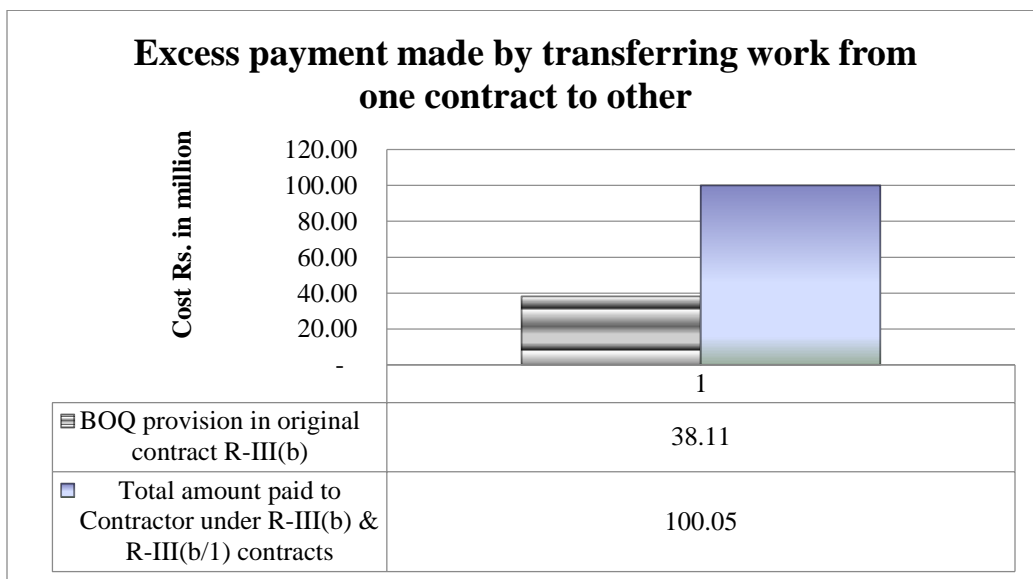
4.3.4 Extra payment made to contractor by transferring work from one contract to another – Rs.61.937 million

As per Para-4 of Memorandum of Understanding (MoU) signed between WAPDA and Contractor, construction of balance work of Complex Structure will be carried out through Variation Order under the Contract R-III (b-1) on the same rates of the Contract R-III (b) including escalation as per understanding submitted by the Contractor.

During Performance Audit of RBOD-III Project Sukkur, it was noticed that work for construction of RBOD Extension from Miro Khan Zero Point to Hairdin Pump Station was awarded to M/s Khyber Grace Pvt. Ltd. on February 17, 2006 at a bid cost of Rs.1,276.042 million under Contract No.R-III (b). After execution of 82.5% of the contract work, the contractor was unable to continue the work due to non-availability of funds, re-alignment issues raised by the Government of Sindh and hurdles created by the locals due to non-payment of land compensation. The Contractor issued "Notice of Suspension" on September 28, 2009 and suspended the work w.e.f. September 07, 2009. Later on, the contract was closed on May 24, 2011 by signing an MoU with the contractor. A work component "Construction of Complex Structures" of the closed contract (R-III-b) was assigned to the same contractor under another contract (R-III b-1). Against BoQ provision of Rs.38.112 million of the component, an amount of Rs.22.655 million was already paid to the contractor under the closed contract and a provision of Rs.15.457 million was left. Further scrutiny revealed that BoQ quantities of the

work were abnormally increased in new contract (R-III b-1) and an amount of Rs.77.394 million (Rs.77.394 million / Rs.15.457 million × 100 = 500.705% in excess of the provision) was paid to the contractor.

Audit held that the remaining work was required to be executed by the contractor within the BoQ cost of the closed contract which could not be done. Resultantly, an extra payment of Rs.61.937 million (**Annex-5**) was made to the contractor and loss was incurred.



The matter was taken up with the management in March, 2022 and reported to MoWR in April, 2022. The management replied that keeping in view the importance of construction of Miro Khan Zero Point (MKZP) Complex Structure, the Consultant made changes in design and recommended construction of Super Passage in place of Syphon without compromising any risks which resulted into increase in quantities. All the design / quantity variations duly certified by the Engineer were also covered in revised PC-I approved by ECNEC.

The DAC in its meeting held on October 26, 2022 directed the management to submit detailed revised reply containing justification for change in design and other factors along with supporting documents and comparative table of BoQ items.

Further progress was not intimated till finalization of the report.

Audit recommends the management to justify the change in design and incurrence of excess expenditure besides implementing the DAC's decision.

(Original Para No.4.1.1)

4.3.5 Undue favour to contractor by not deducting liquidated damages – Rs.53.564 million

As per Clause-47.1 of the Particular Conditions of the contract agreement, the liquidated damages for each day of delay in completion of the whole of the works, or if applicable any section, shall be as given in Appendix to Tender, subject to a maximum of ten percent (10%) of the contract price stated in the letter of acceptance.

During Performance Audit of RBOD-III Project Sukkur, it was noticed that a contract R-III (d/1) for Construction of New Surface Drainage System for Usta Muhammad Drainage Unit- Hadero Branch Drain-Sub Unit was awarded to M/s Muhammad Ayub & Brothers Pvt. Ltd. on August 25, 2006 at a bid cost of Rs.535.636 million to be completed on June 04, 2009 which was extended up to December 21, 2009. The project management withheld certified claims of Rs.12.500 million of the contractor in 2010 due to non-provision of insurance policies. Resultantly, the contractor suspended works in February, 2009 with 37.5% physical completion due to withholding of certified claims and later on the contract was closed by the Employer. The balance work was re-tendered and contract No. R-III (d/3) was awarded to M/s Tameer Associates-Hassas (JV) on April 25, 2019 at a bid cost of Rs.504.621 million.

Audit held that the employer was required to get the contract work insured at the risk and cost of the contractor under Clause 25.3 of General Conditions of contract and impose liquidated damages amounting to Rs.53.564 million (10% of the contract price) instead of withholding certified claims of the contractor but the same was not done.

The matter was taken up with the management in March, 2022 and reported to MoWR in April, 2022. The management replied that in order to avoid further losses in the shape of claims and litigation, an MoU was signed with the contractor to release him from further performance.

The DAC in its meeting held on October 26, 2022 directed the management to submit revised reply explaining the less provision of PSDP funds with proper justification and documentary evidence.

Further progress was not intimated till finalization of the report.

Audit recommends the management to implement DAC's decision.

(Original Para No.4.1.7)

4.3.6 Irregular execution of work without insurance coverage resulting in loss due to flood damages – Rs.31.600 million

As per clause 21, 23, 24 and 25 of the General Conditions read with Clause 25.5 of Particular Conditions of the contract agreement, the contractor was required to place all insurances relating to the contract with the NICL, for the full replacement cost of the work plus an additional sum of 15 percent of such replacement to cover any additional cost of and incidental to the rectification of loss or damage including professional fees and the cost of demolishing and removing any part of the work and removing debris of whatever nature and the contractor's equipment and other things brought on to the site by the contractor for a sum sufficient to provide for their replacement at the site. The contract shall provide the policies to the employer within 84 days of the commencement date.

During Performance Audit of RBOD-III Project Sukkur, it was noticed that a contract No.R-III (d/1) for construction of new surface drainage system for Usta Muhammad Drainage Unit-Hadero Branch Drain-Sub Unit was awarded to M/s Muhammad Ayub and Brothers during December, 2006 at a bid cost of Rs.535.636 million to be completed on June 04, 2009. Commencement notice was issued on November 30, 2006. The contractor was required to arrange and provide insurance policies from the NICL valuing Rs.615.981 million (115% of contract cost) within 84 days after the commencement of the work. However, the contractor did not provide the required insurance policies despite repeated reminders by the consultants. Resultantly, the project management approached NICL vide letters dated October 01, 2009 and November 14, 2009 to provide insurance coverage at the risk and cost of the contractor. The NICL replied that a debit note was issued on November 06, 2007 against which no payment was made by the contractor M/s Muhammad Ayub & Brothers. Meanwhile, heavy flood hit the project area on August 19, 2020 and an estimate of financial impact of flood on the contract for

Rs.31.600 million was prepared by the management which could not be compensated due to non-availability of insurance coverage by the contractor for which responsibility needed to be fixed.

Non-fulfilment of contractual obligations resulted in loss due to flood damages of Rs.31.600 million.

The matter was taken up with the management in March, 2022 and reported to MoWR in April, 2022. The management replied that insurance coverage of works was responsibility of the contractor. The contractor was asked time and again to provide insurance but all went in vain.

The management's reply was not tenable as insurance coverage was required to be obtained under the provisions of relevant contract clauses.

The DAC in its meeting held on October 26, 2022 directed the management to conduct a fact-finding inquiry under supervision of Member (Water) WAPDA within one month.

Further progress was not intimated till finalization of the report.

Audit recommends the management to implement DAC's decision.

(Original Para No.4.1.3)

4.4 Construction and Works

Accurate work execution is crucial for project implementation life cycle, impacting economy and successful completion through management decisions. The Ministry of Planning, Development, and Reform's Manual for Development Projects emphasizes implementing agency responsibility for successful project completion, quality, and results.

Audit found management's inadequate construction planning led to abnormal BoQ item increases. Contractor executed excess quantities with higher rates than engineer's estimate, compared to lower quoted BoQ items.

4.4.1 Extra payment due to abnormal increase in executed quantities against BoQ provision – Rs.500.644 million

As per Rule-4 of the PPRA, procuring agencies, while engaging in procurements, shall ensure that the procurements are conducted in a fair and

transparent manner, the object of procurement brings value for money to the agency and the procurement process is efficient and economical.

During Performance Audit of RBOD-III Project Sukkur, it was noticed that two contracts (R-III (d/1) and R-III (d/2)) were awarded during 2006 & 2007 at bid cost of Rs.535.636 million & Rs.279.269 million, respectively. The contracts were closed after execution of 37.50% & 60% works, respectively, due to non-availability of funds. The closed contracts were re-awarded as R-III (d/3) and R-III (d/4) during 2019 at a bid cost of Rs.504.621 million and Rs.324.848 million, respectively. Comparison of BoQ items of rewarded contracts and paid IPCs revealed that extra payment of Rs.500.644 million (**Annex-6**) was made to the contractor. The extra payment was made on account of abnormal increase in executed quantities of different items ranging from 14% to 47,781% (Quantity in Original Contract R-III (d/2) = 15, Quantity executed in re-awarded contract R-III (d/4) = 7182, Excess executed = 7167, Percentage above executed = $((7182-15)/15 * 100 = 47,781\%)$). Further scrutiny of the record revealed that tendered quantity of item No. 2.3 in contract R-III (d/1) was 50 Cft with BoQ cost of Rs.0.620 million which was increased in retendering (R-III (d/2) to 1,500 Cft with cost of Rs.31.200 million and during execution it was further increased to 8,860.98 cft with payment of Rs.158.093 million. Similarly, tendered quantity under item No.2.3 in contract R-III (d/2) was 20 Cft with BoQ cost of Rs.0.195 million which was increased in retendering (in R-III (d/4) to 3,000 Cft with cost of Rs.44.00 million and during execution it was further increased to 8,162.66 Cft with payment of Rs.105.796 million.

Audit held that abnormal increase/change in executed quantities after re-award of contract was against the spirit of transparency and economy in procurement as mentioned in PPRA rules.

The above state of affairs resulted in extra payment of Rs.500.644 million due to abnormal increase in executed quantities of different items against BoQ provision .

The matter was taken up with the management in March, 2022 and reported to MoWR in April, 2022. The management replied that the works could not be completed within stipulated time due to funds constraints, floods, and realignment between the main stakeholders. Due to these reasons, the works remained

suspended for almost ten years. However, the issues were amicably settled in 2016 and 1st revised PC-I was approved in 2017. The balance works of original contracts were re-awarded in 2019 after incorporating all site requirements. The major reason for increase in cost was time overrun. Presently, the works were completed and handed over to Government of Balochistan for further O&M as per provisions of approved PC-I.

The DAC in its meeting held on October 26, 2022 directed the management to submit revised reply containing justification of item wise increase in BoQ within 30 days.

Further progress was not intimated till finalization of the report.

Audit recommends the management to justify the matter of excess execution of quantities having higher rates than engineer's estimates.

(Original Para No.4.1.4 & 4.1.5)

4.4.2 Extra payment due to execution of quantities in excess of BoQ provision – Rs.77.508 million

As per Para-9.2 of the Manual for Development Projects of the Planning Division, Government of Pakistan, “The implementing agency is the entity charged with the responsibility of successful completion of the project's components including completion of all studies; preparation of plans, specifications, and estimates; the acquisition of land, rights-of-way etc.; procurement of goods and services; construction; project management; engineering, including surveys and inspection, etc. There could be a different implementing agency for each component of a project. To ensure clear lines of responsibility, only one agency can be the implementing agency for a single component. This agency is responsible for ensuring the adequacy of its products through a quality control and quality assurance procedure”.

During Performance Audit of RBOD-III Project Sukkur, it was noticed that a contract No. R-III (b) was awarded to M/s Khyber Grace Pvt Ltd on February 17, 2006 at a bid cost of Rs.1,276.041 million to be completed on July 23, 2009. After completion of 82% of contract work, the contractor issued suspension notice and suspended the work with effect from September 07, 2009, just fifteen (15) days before the completion date, due to non-payment of pending liabilities by

WAPDA and the contract was closed. The contract for balance work was awarded through retendering to M/s Ramzan & Sons on July 17, 2018 at a bid cost of Rs.580.460 million under Contract No.R-III (b/3) which was completed on July 16, 2019 at a cost of Rs.432.734 million. Detailed scrutiny of last paid IPCs and contract agreements No. R-III (b) and R-III (b/3) revealed that BoQ provision of Item No.105 (Extra over items) was 31,650 Cft in the original contract R-III (b) whereas the executed and paid quantities were 65,511 Cft. However, 60,205 Cft quantities of the same item was again executed and paid under contract No.R-III (b/3). Hence, total BoQ quantities of 125,716 Cft (397.21% higher than original contract provision) amounting to Rs.121.818 million were executed against the BoQ provision of 31,650 Cft amounting to Rs.44.310 million. Hence, extra payment of Rs.77.508 million against the original BoQ provision was made (**Annex-7**).

Audit held that the work executed and paid under contract No.R-III (b) was not considered in the execution of the second contract and excess payment was made for the same work.

This resulted in extra payment of Rs.77.508 million due to execution of quantities in excess of BoQ provision in original contract.

The matter was taken up with the management in March, 2022 and reported to MoWR in April, 2022. The management replied that the balance work of original contract was awarded in 2018 after the approval of 1st revised PC-I in 2017 and was completed in stipulated time. It is reiterated that the work was delayed due to funds constraints, realignment issues, flood-2007 & 2010 and delay in approval of revised PC-I.

The DAC in its meeting held on October 26, 2022 directed the management to submit detailed comprehensive reply with proper justification.

Further progress was not intimated till finalization of the report.

Audit recommends the management to justify the increase in quantities and extra payment of BoQ items.

(Original Para No.4.3.1)

4.4.3 Irregular/doubtful payment to contractor for execution of earthwork / caring and handling of water – Rs.48.919 million

As per Senior Engineer letter No.SE/RBOD-III/LRK/10 dated February 04, 2011, after suspension of the work from September 06, 2009 to March 31, 2010, the contractor has re-started the work on Complex Structure only instead of entire reach of the contract. During scrutinizing the IPA No.30, it was found that there was no any change in quantities already submitted in IPA No.29.

During Performance Audit of RBOD-III Project Sukkur, it was noticed that a contract No. R-III (b)-Construction of RBOD Extension from Miro Khan Zero Point to Haidin Pump Station was awarded to M/s Khyber Grace Pvt Ltd on February 17, 2006 at a bid cost of Rs.1,276.041 million to be completed on July 23, 2009. The work was not completed within the stipulated period and 365 days extension was granted with revised completion date as June 23, 2010. The contractor issued suspension notice and suspended the work with effect from September 07, 2009 due to non-payment of pending liabilities by WAPDA. After partial payment, the contractor resumed the work on April 01, 2010 on complex structure with limited resources. However, the contractor did not resume the work on entire project on the plea that partial payment was not sufficient to start work on entire length of the contract. The extended completion period expired on June 23, 2010 and further extension was not granted to the contractor and the contractor again suspended the work on July 08, 2010. As per handing-taking over protocol dated December 31, 2010 and Senior Engineer's letter dated February 04, 2011, the contractor restarted the work on "Complex Structure" only instead of entire reach of the contract.

An amount of Rs.48.919 million under the head "General Items" on account of earth work/caring and handling of water was paid to the contractor on January 17, 2011 against the IPC-30 for work executed up to the period June 10, 2010. Audit held that payment of Rs.48.919 million under the head "General Items" made to the contractor on January 17, 2011 against the IPC-30 was irregular and doubtful as the work was resumed on complex structure only.

Weakness in economy and efficiency resulted in irregular / doubtful payment of Rs.48.919 million in IPC No.30 to contractor for execution of

earthwork / caring and handling of water as the same had already paid vide IPC No.29 & 28A.

The matter was taken up with the management in March, 2022 and reported to MoWR in April, 2022. The management replied that IPA-30 consisted of all the remaining works executed but not claimed by the contractor.

The management's reply was not tenable as there was irregular / doubtful payment of Rs.48.919 million to contractor on account of execution of earthwork / caring and handling of water under IPC-30.

The DAC in its meeting held on October 26, 2022 directed the management to conduct a fact-finding enquiry under supervision of Member (Water) with representatives of GM (M&S), GM (C&M) Water and GM (CCC) and submit report within one month. Further progress was not intimated till finalization of the report.

Audit recommends the management to implement DAC's decision.

(Original Para No.4.3.3)

4.5 Project Management

Project management involves organizing activities for synergy, ensuring successful completion within scheduled timelines, while balancing time, cost, and quality constraints. Effective project management requires strong leadership skills, clear communication and the ability to adapt to change and challenges as they arise.

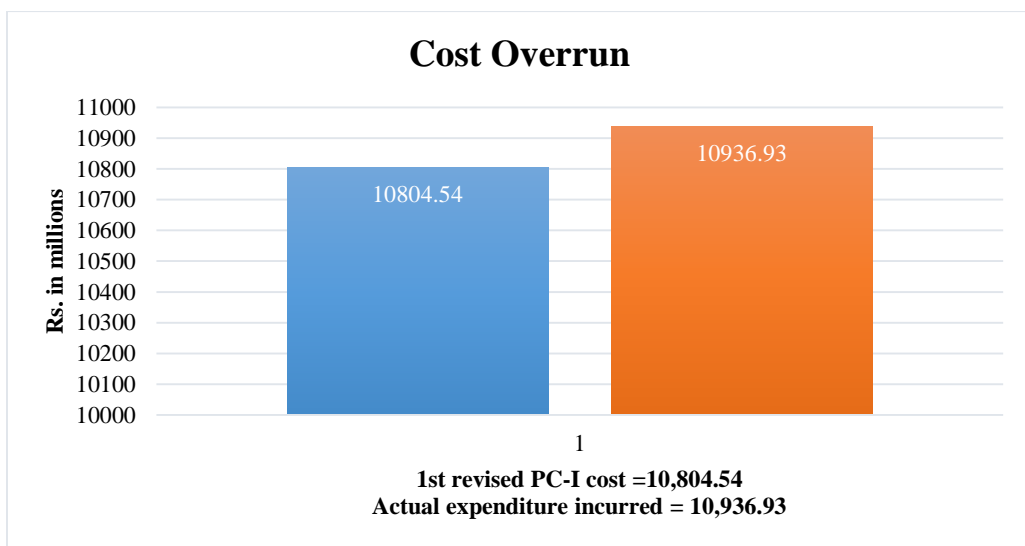
Project success depends on timely, scope, and quality execution. Project completion or closure occurs when all funds are utilized and objectives are achieved. Inappropriate planning leads to delayed completion and non-achievement of benefits, impacting WAPDA and the economy.

4.5.1 Cost overrun of Rs.159.39 million with time overrun of 13 ½ years

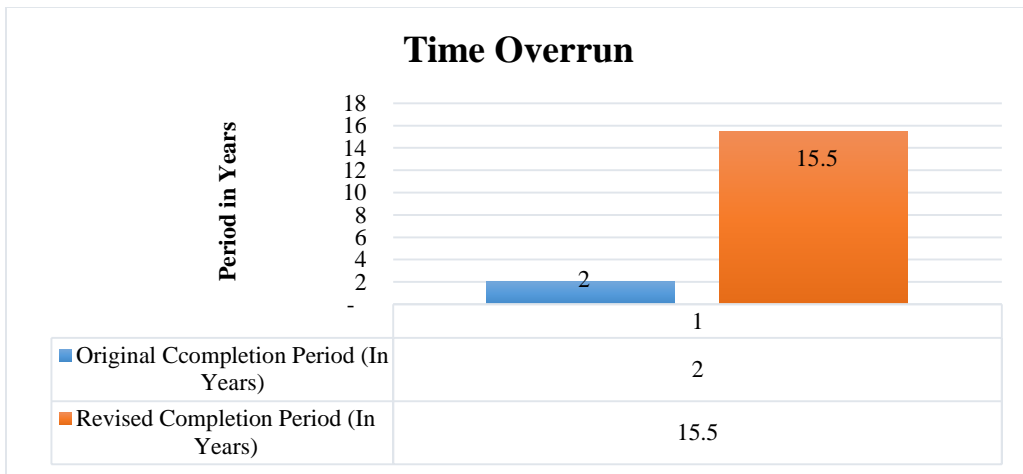
As per Clause-7.5 of Manual for Development Projects referring ECC's decision dated December 27, 1988, "Those responsible for not undertaking forward planning and causing delays in implementation of projects should be taken to task".

During Performance Audit of RBOD-III Project Sukkur, it was noticed that ECNEC in its meeting held on January 07, 2004 approved the project at a total cost of Rs.4,485.200 million with completion date of December 30, 2005. Seven contracts were awarded in 2005 to 2011 for execution out of which three contracts could not be executed / closed due to non-arrangement of funds. The closed contracts were re-awarded in 2018 and 2019 upon availability of funds and completed in June, 2019 and June, 2020. **(Annex-8)**

As such, the project was required to be completed in 2005 as per implementation schedule of PC-I but the same was not done within the stipulated time. Later on, 1st revised PC-I of the project was approved by ECNEC in July 26, 2017 at a cost of Rs.10,804.540 million with stipulated date of completion as November, 2019. There was time over run of 13 ½ years at the time of approving the 1st revised PC-I with cost overrun of Rs.159.39 million. However, the actual expenditure incurred on project was Rs.10,963.93 million up to June, 2021 which resulted in total cost overrun of Rs.159.39 million as compared to the cost of 1st revised PC-I.



This resulted in cost overrun of Rs.159.39 million as compared to 1st revised PC-I and time overrun of 13 ½ years as compared to original PC-I.



The matter was taken up with the management in March, 2022 and reported to MoWR in April, 2022. The management replied that all the works of the project were completed. Moreover, the completed works in Balochistan were handed over to Government of Balochistan for O&M whereas works pertaining to Government of Sindh were in process for handing over. 1st revised PC-I was prepared and submitted to ECNEC but due to realignment issues it was delayed till 2016 and was approved in 2017.

The DAC in its meeting held on October 26, 2022 directed the management to submit revised reply with proper justification and documentary evidence to Audit.

Further progress was not intimated till finalization of the report.

Audit recommends the management to implement the DAC's decision besides justifying the inordinate delay in completion of project and resultant cost overrun.

(Original Para No.4.4.1)

4.5.2 Non-achievement of envisaged benefits as per original PC-I

As per PC-I, approved by the ECNEC on January 07, 2004 with cost of Rs.4,485.200 and completion period of two years i.e. up to December 30, 2005. Main objectives of the project as per PC-I were, increase in production of different crops through disposing of saline effluents from cultivated land and control of flood water to save the cultivated areas.

During Performance Audit of RBOD-III Project Sukkur, it was noticed that ECNEC in its meeting held on January 07, 2004 approved the project at a total cost of Rs.4,485.200 million with completion date of December 30, 2005. Seven contracts were awarded in 2005 to 2011 for execution out of which three contracts could not be executed/closed due to non-arrangement of funds. The closed contracts were re-awarded in 2018 and 2019 upon availability of funds and completed in June, 2019 and June, 2020. As such, the project was required to be completed in 2005 as per implementation schedule of PC-I but the same was not done within the stipulated time. Later on, 1st revised PC-I of the project was approved by ECNEC in July 26, 2017 at a cost of Rs.10,804.540 million with stipulated date of completion as November, 2019 which was further extended up to June 06, 2021. Due to inordinate delay of 13 ½ years in completion of the project, the envisaged benefits valuing Rs.8,305.190 million (Table-43 of Original PC-I) could not be reaped. **(Annex-9)**.

Non-adherence to timelines of original approved PC-I provisions resulted in delays in completion of the project and non-achievement of envisaged benefits amounting to Rs.8,305.190 million.

The matter was taken up with the management in March, 2022 and reported to MoWR in April, 2022. The management replied that all the completed works of RBOD-III Project had provided their envisaged benefits as per approved PC-I. However, maximum benefits would only be achieved after completion of RBOD-II Project which would ultimately dispose-off all the effluent of RBOD-I & III Projects to the Sea.

The DAC in its meeting held on October 26, 2022 directed the management to submit detailed reply and also highlight the positive socio-economic uplift in the surrounding areas of project.

Further progress was not intimated till finalization of the report.

Audit recommends the management to justify the delay in completion of the project and non-achievement of envisaged benefits besides implementing DAC's decision.

(Original Para No.4.4.3)

4.6 Overall Assessment

Overall assessment of the project with reference to its intended objectives is as follows:

Economy

Economy means spending only that much which is barely essential to achieve the project goals or obtaining the appropriate quantity and quality of resources (inputs) at the optimal cost possible. Poor financial planning/delay in funds arrangement and deviations from the Public Procurement Rule-2004, procurement cost of the RBOD-III Project has substantially increased as compared to the cost provision in the original approved PC-I, which has been extensively highlighted in the audit findings. Cost of execution of the Project had exceeded over the original approved cost of the project by 140.89% i.e. from Rs.4,485.200 million in the original PC-I to Rs.10,804.540 million in the revised PC-I. It was observed that contracts were awarded in 2005 to 2011 without financial closure; resultantly, three contracts could not be completed and closed due to non-arrangement of funds. The closed contracts were re-awarded during 2018 and 2019 at higher cost than the original estimates. Extra payments were observed by abnormal increase in BoQ rates and quantities of closed contracts. The project had to bear additional cost on account of rehabilitation works due to flood damages, for which no insurance claims were lodged. Delay in award of contracts had increased the cost of works exorbitantly.

Efficiency

Efficiency implies maximizing output from the given resources or minimizing input for the given outputs. At implementation stage, the project was not properly handled and serious contractual issues regarding fulfilment of obligations on part of the Employer and Contractors raised. The Contractors failed to provide/keep intact insurance coverage of their works, required under the Contract Agreements which resulted in extra expenditure on restoration of flood damages by the Employer. On the other hand, the Employer failed to timely arrange the required funds to clear certified claims of the Contractors within stipulated period which resulted in pre-mature closure of different contracts and re-award of the same at higher BOQ rates. Excessive delays were observed on the part of implementing agency at all levels of execution which resulted in overall

time overrun of 13 ½ years and cost overrun of Rs.6,478.73 million. A lot of design changes were observed during the course of the implementation of the project. Almost entire contract was changed from its original contracted work, which caused huge increase in contract cost. Execution of all the contracts was delayed causing EoT cost implications.

Effectiveness

Effectiveness referred to the extent the objectives have been achieved or the relationship between the Organization's intended and actual results. The project was envisaged to increase in production of different crops through disposing of saline effluents from cultivated land and through control of flood water to save the cultivated areas; however, effectiveness of the project can only be judged in that case when it will be completely handed over to its ultimate users i.e., irrigation departments of the Sindh and Baluchistan Provinces, sufficient O&M staff deputed, properly operationalized and feedback received. The project has not yet been completely handed over to the concerned provinces. As per PC-I of the project, WAPDA was only responsible for execution of the project. The Operation & Maintenance (O&M) was responsibility of respective provincial governments. But due to delay in handing over of the completed works, WAPDA had to bear O&M cost which was an extra financial burden on the Authority. So far, no benefits have been achieved of this project.

Performance Rating of Project

Unsatisfactory

Risk Rating of Project

Substantial

5. CONCLUSION

Due to poor financial planning and monitoring by the executing agency and non-fulfillment of contractual obligations on part of the Employer as well as Contractors, not only has badly affected smooth implementation/execution of the project but also increased its cost and delayed its completion substantially. Main factor of increase in cost and delay in completion was Commencement of the project without financial closure, which resulted in delay in payment to the Contractors against their certified claims which led to premature closure of different contracts and later on retender of the same at higher BoQ rates and with increased BoQ quantity. The other factor was non provision of insurance coverage by the Contractors to their contracted works in accordance with conditions of the Contract Agreements which resulted in incurring of heavy expenditure by the WAPDA from its own sources on restoration of flood damages-2010. Resultantly the project was delayed for 13 ½ years and cost increased by Rs.6,319.34 million. In the light of results of performance audit, implementation/execution of the project was neither economical nor efficient. The project has not yet been completely handed over to the concerned provinces for O&M, therefore, envisaged objectives of the Project (as defined in sub-para-ii of section-1 of the report) have not been achieved due to lack of engagement of stakeholders. Effectiveness of the project can only be judged when it will be completely handed over to the concerned provinces for O&M and feedback received.

Lessons Identified

- To strictly follow timelines for project execution
- To ensure proper project monitoring and control
- Avoiding risks and cost overrun
- Proper stakeholder's engagement required

ACKNOWLEDGEMENT

We wish to express our appreciation to the management and staff of Right Bank Outfall Drainage-III (RBOD-III) Project WAPDA, Sukkur for the assistance and cooperation extended to the auditors during this assignment.

Annexes

Annex-1**(Para No.4.1.1)****Statement showing detail of works completed but not handed over****(Amount Rs.in million)**

Province	Completed Works	Handed Over	Remaining	O&M Cost borne by WAPDA up to 31.12.2022	Total
Balochistan	4,343.500	4,343.500	--	--	--
Sindh	6,460.940	--	6,460.940	143.903	6,604.843
Total	10,804.440	4,343.500	6,460.940	143.903	6,604.843

Statement showing detail of cost of not transferred to Provincial Government**(Amount Rs.in million)**

Province	Completed Works	Cost Transferred to Provinces	Remaining / Cost not Transferred
Balochistan	4,343.500	1,990.550	2,352.950
Sindh	6,460.940	4,281.742	2,179.198
Total	10,804.440	4,343.500	4,532.148

Annex-2

(Para No.4.2.1)

Statement showing detail of excess payment made to the contractor due to escalation

Description	Amount (Rs.)
Total Amount Paid to the Contractor under Contract No.R-III (f)	904,825,971
Less: Total Contract Cost	572,134,775
Net Increase in Contract Cost with Escalation	332,691,196
Less: 15% Normal Escalation (Rs.572,134,775 * 15%)	85,820,216
Excess payment of escalation due to delay in completion	246,870,980

Annex-3**(Para No.4.2.2)****Statement showing detail of increase in rates, costs and delays in completion of re-awarded contracts****(Amount Rs. in million)**

Contract No.	Name of Contractor	Date of Award of Contract	Original contract cost	Stipulated date of completion	%age of completed work before close of contract	Date of re-award of contract	Cost of re-awarded contract	Name of Contractor	Date of completion of contract	Original cost of BoQ Items before close of contract	Cost of BoQ Items executed after re-award	Increase in cost due to change in BoQ rates after re-award of contract	Delay in completion of project (In Months)
1	2	3	4	5	6	7	8	9	10	11	12	13= (12-11)	14
R-III (D-1)	M/s M. Ayub & Brothers	Aug 25, 2006	535.636	Jun 04, 2009	37.5%	Apr 25, 2019	504.621	M/s Tameer Associates-Hassas (JV)	Jun 21, 2020	306.955	419.628	112.673	132 months
R-III (D-2)	M/s Khyber Grace Pvt. Ltd	Jan 31, 2007	279.269	May 01, 2009	60%	Mar 29, 2019	324.848	M/s Tameer Associates-Hassas (JV)	Jun 15, 2020	226.828	354.006	127.178	108 months
Total										533.783	773.634	239.851	

Annex-4

(Para No.4.3.2)

Statement showing detail of excess payment due to execution of quantities in excess of BoQ provision

Description	Amount (Rs.)
BoQ Provision in Contract No. R-III (b)	815,076,530
Less: Amount paid in Contract No.R-III (b)	660,517,241
Remaining BoQ Provision in Contract No.R-III(B) on suspension of work	154,559,289
Less: Payment made in Contract No. R-III (b/3)	432,733,890
Excess Paid Amount	278,174,601

Annex-5

(Para No.4.3.4)

**Statement showing detail of excess payment made to the contractor by
transferring work from one contract to other**

Description	Amount (Rs.)
Amount Paid under Original Contract R-III (b)	22,655,689
Add: Amount Paid under Contract (R-III (b/I)	77,394,299
Total Amount Paid to the Contractor	100,049,989
Less: BoQ Provision of Item in Original Contract i.e. R-III (b)	38,112,770
Excess Paid Amount	61,937,219

Annex-6**Para No.4.4.1****Statement showing detail of extra payment due to abnormal increase in executed quantities against BoQ provision**

Sr. No.	Original Contract	Description of work	Original Contract Price	Percentage of Work Completed at the of Suspension	Re-awarded contract	Contract Price of re-awarded works	Extra cost paid on account of increased BoQ quantities
1	R-III (d/1)	Construction of New Surface Drainage System for Usta Muhammad Drainage Unit-Hader Branch Drain Sub Unit	535.636	37.50%	R-III (d/3)	504.621	271.682
2	R-III (d/2)	Construction of Surface new Drainage System for Usta Muhammad Drainage Unit-Usta Muhammad Main Drain Sub Unit	279.269	60%	R-III (d/4)	324.848	228.962
Total			814.905			829.469	500.644

Annex-7

(Para No.4.4.2)

Statement showing detail of excess payment due to execution of quantities in excess of BoQ provision

Description	Quantity (in Cft)	Rate Rs. per Cft	Amount (Rs.)
Amount paid against Item No.105 in Contract No.R-III (b)	65,511.30	1,400	91,715,820
Add: Amount paid against Item No.105 in Contract No.R-III (b/3)	60,205	500	30,102,500
Total Amount Paid to the Contractor under Item No.105	125,716.30	--	121,818,320
Less: BoQ Provision of Item No.105 in Original Contract No.R-III (b)	31,650	1,400	44,310,000
Excess Paid Amount	--	--	77,508,320

Annex-8
(Para No.4.5.1)

Statement showing detail of works executed in RBOD-III Project

Amount Rs. in million

Sr. No.	Name of Contract	Contract cost	Date of award of contract	Stipulated date of completion	Actual date of completion	Status
1	R-III (B)	1,276.041	17.02.2006	23.07.2009	-	MoU signed on 24.05.2011 between WAPDA and M/s Khyber Grace for release of contractor M/s Khyber Grace for further performance of contract due to financial constraints.
2	R-III (B-1)	641.449	21.03.2011	24.12.2012	24.12.2012	-
3	R-III (B-2)	38.478	23.06.2016	24.08.2016	24.08.2016	-
4	R-III (C)	439.695	04.03.2005	24.09.2007	24.09.2008	-
5	R-III (D-1)	535.636	25.08.2006	04.06.2009	-	MoU signed on 05.10.2011 between WAPDA and M/s Mohammad Ayub & Brothers for release from further performance of contract.
6	R-III (D-2)	279.269	30.01.2007	01.05.2009	-	MoU signed on 24.05.2011 between WAPDA and M/s Khyber Grace for release of contractor M/s Khyber Grace for further performance of contract due to financial constraints.
7	R-III (F)	572.135	17.05.2006	19.11.2008	30.09.2017	-
Balance works awarded against the closed contracts						
8	R-III (B-3)	580.460	17.07.2018	16.07.2019	16.07.2019	The contract was awarded against the closed contract No.R-III (B-3).
9	R-III (D-3)	504.621	25.04.2019	21.06.2020	21.06.2020	The contract was awarded against the closed contract No.R-III (D-1).
10	R-III (D-4)	324.848	29.03.2019	15.06.2020	15.06.2020	The contract was awarded against the closed contract No.R-III (D-2).

Annex-9
(Para No.4.5.2)

Envisaged Project Benefits

(Amount Rs. in million)

Sr. No.	Year	Amount
1	2006	208.36
2	2007	318.10
3	2008	427.85
4	2009	537.59
5	2010	592.46
6	2011	592.46
7	2012	592.46
8	2013	592.46
9	2014	592.46
10	2015	592.46
11	2016	592.46
12	2017	592.46
13	2018	592.46
14	2019	592.46
15	2020	592.46
16	2021 (6 months)	296.23
Total:		8,305.19

Source: Table-43 of Original PC-I

