



**SPECIAL STUDY REPORT
ON
HANDING / TAKING OVER OF
WAPDA COMPLETED PROJECTS
AUDIT YEAR 2020-21**

AUDITOR GENERAL OF PAKISTAN

PREFACE

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, require the Auditor General of Pakistan to conduct audit of any authority or body established by the Federation. The special study on handing/taking over of WAPDA completed projects was carried out accordingly.

The Directorate General of Audit Water Resources conducted this special study on handing/taking-over of WAPDA completed projects for the period up to October, 2020 with a view to reporting significant findings to stakeholders. In addition Audit also assessed, on test check basis, the reasons of non-handing over of the projects by WAPDA to respective Provincial Governments. The report is based on special study of completed WAPDA projects with a view to ascertain the causes of non-handing/taking-over of the completed projects by WAPDA and to assess resultant impacts on the intended outcomes of these projects. The audit observations included in this report have been finalized in the light of discussions in the Departmental Accounts Committee (DAC) meeting.

The special study 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: 14 APR 2023

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(Muhammad Ajmal Gondal)
Auditor General of Pakistan

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Abbreviations and Acronyms

ACS	Additional Chief Secretary
AF	Acre Feet
CCA	Cultivable Command Area
CCI	Council of Common Interests
CF&AO	Chief Finance & Accounts Officer
CRBC	Chashma Right Bank Canal
CSA	Cost Sharing Agreement
DAC	Departmental Accounts Committee
D.I Khan	Dera Ismael Khan
DLC	Defect Liability Certificate
DNP	Defects Notification Period
DSO	Dam Safety Organization
ECNEC	Executive Committee of National Economic Council
EPC	Engineering, Procurement, Construction
FCC	Flood Carrier Channel
Ft	Feet
FY	Financial Year
GCA	Gross Cultivable Area
GFR	General Financial Rules
GoS	Government of Sindh
HEIS	High Efficiency Irrigation System
INTOSAI	International Organization of Supreme Audit Institutions
ISRIP	International Sedimentation Research Institute Pakistan
KM	Kilo Meter
KP	Khyber Pakhtunkhwa
MoPD & SI	Ministry of Planning and Development & Special Initiative
MoU	Memorandum of Understanding
MoWR	Ministry of Water Resources
NWFP	North West Frontier Province
O&M	Operation & Maintenance
PAC	Public Accounts Committee
PC-I	Planning Commission Proforma-I
PC-II	Feasibility Study
PC-III	Monthly Progress Reports
PC-IV	The completion reports

PC-V	Annual Reports of O&M
PD	Project Director
PSDP	Public Sector Development Programme
RCP	Rainee Canal Project
RD	Reduced Distance
RSL	Ramzan & Sons Limited
SDO	Small Dam Organization
SE	Superintending Engineer
SMBR	Senior Member Board of Revenue
SMC	Sultan Mehmood & Company
SOPs	Standard Operating Procedures
TOC	Taking Over Certificate
u/s	Upstream
WAPDA	Water and Power Development Authority

EXECUTIVE SUMMARY

The Directorate General Audit Water Resources conducted the special study on handing/taking over of completed projects by WAPDA. The main objective of the study was to ascertain the causes of non-handing over of the completed water sector projects by WAPDA to respective Provincial Governments and to assess resultant impacts on the intended outcomes of these projects.

During the study, three (03) completed projects of WAPDA namely Darawat Dam Project Hyderabad, Rainee Canal Project Guddu and Chashma Right Bank Canal (CRBC) Project D.I. Khan were examined to identify the major factors underlying non-handing over of these projects and to assess the impacts of non-realization of envisaged benefits to the relevant stakeholders besides analyzing the impacts of deterioration of projects due to weak O&M. The period of study was up to October, 2020. The audit was conducted in accordance with International Organization of Supreme Audit Institutions (INTOSAI) Auditing Standards. Accordingly, the key audit findings are given below:

Key Audit Findings

- i. Delayed handing over of completed projects due to non-finalization of contractor's claims – Rs.1,898.72 million
- ii. Non-recovery of land acquisition cost from Provincial Governments – Rs.1,544.11 million
- iii. Recurring loss/non-recovery of O&M cost due to non-handing over of projects to Provincial Governments – Rs.1,434.50 million
- iv. Extra cost due to deterioration of canal lining and flood carrier channels – Rs.1,212.77 million
- v. Wasteful expenditure on construction of divide wall – Rs.1,180.70 million
- vi. Non-clearance of WAPDA's loan leading to delay in handing over of CRBC project – Rs.630.05 million
- vii. Non-execution of remedial works on Gudh Nullah super passage structure – Rs.546.95 million
- viii. Non-achievement of envisaged benefits

1. INTRODUCTION

WAPDA is mandated to develop water and hydropower resources in the country. It is the prime agency for executing projects related to water storages. Water Sector Projects are mainly carried out to meet the irrigation needs of the country and to increase the cultivable land base. As such, these projects are cross-cutting across provinces and major benefits are to be reaped by the provinces. WAPDA only acts as an executing agency and is required to handover such projects to respective Provincial Governments after their successful completion for Operation & Maintenance (O&M) and for their further linkage with downstream land owners / farmers.

Achievement of envisaged benefits of any project depends on its successful execution and completion within the scheduled time, scope and quality. The project is considered to be completed or closed when all the funds have been utilized and objectives achieved. As per Para-12.5 of Manual for Development Projects, the financial closure may be achieved within six months of the operational closure. The financial closure follows the operational closure as soon as possible. Ideally, the operational and financial closures should be done simultaneously in order to avoid large gaps between the operational closure and financial closure. At this stage, the project has to be formally closed and completion report (PC-IV proforma) should be submitted to Ministry of Planning and Development & Special Initiative (MoPD&SI). Timely efforts should be made to hand over the completed project to the agency responsible for maintenance & operation and provision of maintenance cost to the authority concerned for obtaining the deliverables. This exercise should be taken in hand before six months of the expected completion date. After the closure of the project, the annual operation reports have to be submitted to the Planning Commission every year for five years on PC-V proforma for evaluation.

In this special study, WAPDA's three (03) projects, Darawat Dam Project, Rainee Canal Project (RCP) and Chashma Right Bank Canal (CRBC) Project were selected to ascertain whether completed projects were handed over in timely manner or not and to assess resultant impacts on the intended outcomes of these projects. It is, however, observed that these Water Sector Projects were completed but not handed over to respective Provincial Governments within the stipulated time after their completion. For instance, Rainee Canal Project (RCP)

was completed in 2014 but has not been handed over to Sindh Government as yet. Darawat Dam Project was also completed in 2014 but only Irrigation System was handed over in 2018 and Dam part was handed over to Dam Safety Organization (DSO) Irrigation Department Government of Sindh in 2020 for further operation and maintenance. Chashma Right Bank Canal (CRBC) was completed in 2003 and only distributaries and minors were handed over to the Khyber Pakhtunkhwa (KP) and Punjab Governments but the CRB main canal has not been handed over to Punjab Government as yet. In 2020, Council of Common Interests (CCI) decided to hand over the CRBC to Provincial Governments.

In this backdrop, the issue of non-handing over of the completed projects assumes significance due to non-realization of envisaged benefits, deterioration of project infrastructure and extra burden in the shape of operation, maintenance and administrative costs.

Rationale for Special Study

Development of Water Sector Projects involves huge investments from public exchequer, therefore, their completion and achievement of intended objectives as a result of completion of projects hold prime significance. It has been observed that non-handing/taking-over of completed WAPDA projects results in non-realization of intended objectives as well as deterioration of project infrastructure due to lack of ownership on behalf of the provinces. The administrative and financial costs incurred have become a great concern for financiers as well as client/beneficiaries. The scenario warrants special study in order to ascertain the causes of non-handing/taking-over of the completed projects by WAPDA in a holistic perspective and to assess the impacts on the desired outcomes of these projects.

In view of aforementioned facts, three completed WAPDA projects namely Darawat Dam Project (2014), Rainee Canal Project (2014) and CRBC project (2003) were selected on the basis of volume of cost incurred, inordinate delay in handing/ taking over, contractual & financial mis-management and sensitivity with respect to planned objectives.

1.1 Brief History of the Projects

1.1.1 Rainee Canal Project

Rainee Canal is an agricultural project envisaged for development of water and land resources within the less developed and severe water scarce area. The Project was planned in accordance with government policy to utilize potential water resources available during the flood season.

The Project aims at the revival of command area of old Rainee River and transform it into a weir-controlled canal off-taking from upstream of Guddu Barrage to supply about 5,155 cusec discharge (under Phase-I & II) during Kharif Season. Rainee Canal Project (Phase-I & II) area comprise of Gross Cultivable Area (GCA) of 667,154 acres and aims to develop about 412,400 acres Cultivable Command Area (CCA) of land in arid zone along eastern fringe of the Guddu Barrage command in the Districts of Ghotki, Sukkur and Khairpur districts. Almost all of the Contracts under Phase-I of the Project were completed during 2010-2011; except one contract which was completed in 2014 making Phase-I of the Project complete and ready for handing / taking over to Irrigation Department, Government of Sindh (GoS) for O&M and regulation purpose.

Date of commencement of the project	October, 2002
Date of completion of the project	June, 2014
Cost of the project as per original PC-I	Rs.18,862 million
Cost of the project as per 1 st revised PC-I	Rs.20,533.84 million

(Source: Project Digest & PC-I)

Objectives of the project

The planned objectives of Rainee Canal Project as stated in PC-I were as follows:

- i. Command a new fertile culturable command area by providing water during high flow period in Kharif season;
- ii. Provision of drinking water for human being, livestock and other animal in severe water scare area of desert region;

- iii. Provision of water as and when demanded by Pak-Army to recharge obstacle ponds along Pak-India border for defense requirement;
- iv. Boost agricultural production and ultimately reducing the imports of food grain, fiber and oilseeds;
- v. Development of forestry, fisheries and range management in area, and
- vi. Enhanced opportunities for employment in Public as well as private sector.

1.1.2 Darawat Dam Project:

The site of Darawat Storage Dam is located at about 70 KMs West of Hyderabad town and 135 KMs North East of Karachi across Nai Baran. The project site lies in Thatta / Jamshoro district in Sindh Province and can be found on SOP topographic sheet number 35-O/15 with a scale of 1:50,000.

The project aims at irrigating and storing flood waters of Nai Baran, and thus an average of about 89,339 AF water will be annually available for developing irrigated agriculture by utilizing High Efficiency Irrigation System (HEIS) in a total command area of 25,000 acres of the project.

Project was completed in August, 2014. After handing over of the project to Province of Sindh, GoS will take responsibilities of O&M.

Date of commencement of the project	June, 2010
Date of completion of the project	August, 2014
Cost of the project as per original PC-I	Rs.3,175 million
Cost of the project as per 1 st revised PC-I	Rs.9,300 million
Cost of the project as per 2 nd revised PC-I	Rs.11,768 million

(Source: Project Digest & PC-I)

Objectives of the project

The planned objectives of Darawat Dam Project as stated in PC-I were as follows:

- i. Irrigated agriculture development of 25,000 acres;
- ii. Conservation of water for more productive use;
- iii. Socio-economic uplift of the area and poverty reduction in the area;
- iv. Women emancipation by allotment of developed state land to landless poor women of the area, and
- v. Fisheries development.

1.1.3 Chashma Right Bank Canal

Chashma Right Bank Canal (CRBC) is an inter-provincial Irrigation Project for KP & Punjab Provinces. It commands a total area of about 606,000 acres on the right bank of river Indus, 366,000 acres and 240,000 acres in KP & Punjab Province respectively. The canal is 170 miles long. The canal has total discharge capacity of 4,879 cusecs at its head off-taking from Chashma Barrage. The project was planned to be constructed in Stage-I, II & III, which was completed in December, 2003. Since then, WAPDA is entrusted with the responsibility of O&M CRBC under Cost Sharing Agreement (CSA), 2002. Government of KP and Punjab Province has not taken over the twenty nine (29) and twenty (20) flood carrier channels respectively as per agreement, 2002.

Date of commencement of the project	1978
Date of completion of the project	2003
Cost of the project as per original PC-I	Rs.1,570 million
Cost of the project as per 1 st revised PC-I	Rs.3,478 million
Cost of the project as per 2 nd revised PC-I	Rs.10,213 million
Cost of the project as per 3 rd revised PC-I	Rs.13,870 million
Cost of the project as per 4 th revised PC-I	Rs.17,097 million

(Source: Project Digest & PC-I)

Objectives of the project

The planned objectives of the Chashma Right Bank Canal Project as stated in PC-I were as follows:

- i. To provide and increase existing irrigation supply by bringing new area under cultivation, to attain the irrigation intensity in the CCA;

- ii. To provide irrigation supplies to lift area lying in the left side of main canal through sump / pump system;
- iii. To provide effective flood disposal system and surplus irrigation water through command area;
- iv. To provide stimulus to industrial development in the project area, particularly in agro-based industries, and
- v. To provide portable drinking water to a number of villages depending on shallow hand pumps and where no sweet water is available.

2. STUDY DELINEATION

The special study on handing and taking over of completed WAPDA projects is described in detail with reference to its purpose, scope and beneficiaries in the following paragraphs.

2.1 Purpose of study

- i. To ascertain the causes of non-handing and taking over of the completed water sector projects by WAPDA and to assess resultant impacts on the intended outcomes of these projects;
- ii. To assess the impacts of non-realization of envisaged benefits to the relevant stakeholders, deterioration of projects due to weak O&M, continued blockage of human and financial resources of WAPDA and financial burden on the PSDP in the shape of O&M costs despite completion of projects, and
- iii. To recommend measures to improve policies and practices to streamline the process of handing over of completed projects.

2.2 Scope of study

Scope of the special study included review of the following completed WAPDA projects:

- i. Darawat Dam Project, Hyderabad
- ii. Rainee Canal Project (RCP), Guddu
- iii. Chashma Right Bank Canal (CRBC) Project WAPDA, D.I. Khan

2.3 Beneficiaries of study

The special study would be beneficial for provinces because timely handing over of projects would increase the cultivable land and bring economic benefits. The study would also be beneficial for WAPDA and Government of Pakistan as handing over of projects would reduce burden of extra cost required for rehabilitation and operation & maintenance.

3. STUDY DESIGN

The study was designed keeping in view the time allocated, availability of data and methodology adopted, as enumerated under the following heads:

3.1 Time Period

The Special Study on handing / taking over of completed projects covered the period from the completion of Darawat Dam Project and Rainee Canal Project and current status of CRBC Project, in order to ascertain the delays and identify the causes of delays in handing over of the projects.

3.2 Data

Main data was collected from the following sources to derive study results:

- i. Original and revised PC-I(s);
- ii. Feasibility study report / PC-II;
- iii. Contract agreements / MoUs;
- iv. Consultancy agreements;
- v. Trial Balances with schedules;
- vi. Budget & expenditure statements;
- vii. Monitoring and Physical progress reports issued by project management and consultants;
- viii. Minutes of authority's meetings;
- ix. Correspondence files relating to handing / taking over the projects;

- x. Taking over certificates (TOC) along with related documents;
- xi. Detail of PSDP funds released and expenditure;
- xii. Analysis of price escalation claims and delayed payment claims, and
- xiii. Liabilities on account of contractors and consultants' payments.

3.3 Methodology

The methodology adopted during the execution of special study was as under;

- i. Discussions with the management;
- ii. Examination of the selected record, documents of the project to assess major causes and impact of non-handing over the completed projects on test check basis;
- iii. Examination of quality of internal controls, and
- iv. Review of compliance to generally accepted management practices.

4. DATA ANALYSIS

Data was collected through requisition of record during execution of the study. The data was available in the offices of Project Directors Darawat Dam Project, Hyderabad, Raineer Canal Project, Guddu and Chashma Right Bank Canal Project, D.I. Khan. On the basis of data analysis, discrepancies have been reported in the study results.

5. STUDY RESULTS

5.1 Major causes of non-handing/taking over of WAPDA's completed projects

The development projects are unique in their output, having a definite starting and ending point; hence temporary in nature, and are carried out to manifest an organization's strategic objectives. There is a growing interest in how these projects are managed within the public sector in Pakistan. Para-4.3 and 12.3 of Manual for Development Projects states that the project management is the art of managing the project, and its deliverables with a view to producing finished products or services. The management includes: identifying requirements, establishing clear and achievable objectives, balancing the competing demands from different stakeholders and ensuring that a commonality of purpose is achieved. The project closure involves handing over the deliverables to the authorities concerned, closing of the supplier's contracts, closure of bank account, releasing security money, staff and equipment and informing stakeholders about the closure of the project as per the last approved PC-I.

Audit observed that the training of staff of the Provincial Irrigation Departments of respective Provincial Governments for effective operation & maintenance of the completed projects should be the part and parcel at the initiation of the project. The capacity building of staff of respective Provinces was not planned in all three completed projects. It was one of the reasons that the provinces were reluctant to take over the completed projects.

WAPDA's completed projects were not handed over timely due to improper coordination by the Provincial Irrigation Department and financial mismanagement / wastage of resources in the shape of cost incurred on construction of divide wall at 4th bay. This delayed the handing/taking over of completed projects and created controversy among all the stakeholders i.e. WAPDA and Provincial Government of Sindh. The delay in finalization of contractor's claims was also a matter of concern as Small Dam Organization (SDO) Circle Sindh Hyderabad emphasized on clearance of all the liabilities/claims on account of execution of works and no claim would be entertained by Irrigation Department (Government of Sindh), after taking over Dam Project. Moreover, the delays in

recovery of cost of land acquisition from Provincial Governments and bridge financing by WAPDA to cope with the financial system of projects for payment of salaries of staff deployed at these projects put an extra financial burden upon WAPDA being the executor of projects. The aspects of improper planning, coordination and financial mismanagement which resulted in delays in handing over of the completed projects are further highlighted in detail in the following observations.

5.1.1 Delayed handing over of completed projects due to non-finalization of contractor’s claims – Rs.1,898.72 million

According to section-8.7.2(3) of WAPDA Accounting and Financial Reporting Manual, “On the completion of construction of a component, the Budget and Accounts Officer will satisfy himself that all liabilities in respect of that job have either been paid or provided for and that all credits relating to that job have been taken into account...”. Moreover, as per letter issued by Small Dam Organization (SDO) Circle Sindh Hyderabad dated July 16, 2020, all the liabilities/claims on account of execution works must be cleared. No any claim be entertained by Irrigation Department, Government of Sindh, after taking over Dam Project, clearance certificate / undertaking.

During special study, it was noticed that two WAPDA projects were completed in 2014 at a cost of Rs.28,554.02 million incurred up to FY 2019-20. The contractor of Darawat Dam submitted the Final Statement on January 02, 2018 after expiry of Defects Notification Period (DNP) on August 31, 2017. But despite lapse of more than two and half years, the claims of the contractor amounting to Rs.1,818.72 million were not finalized. Moreover, contractor’s claim of Rs.80 million in respect of RCP on account of interest on delayed payments was also not finalized. Audit held that due to non-finalization of these claims, the handing over of completed projects could not be ensured well in time which caused incurrence of O&M cost of completed projects to be borne by WAPDA.

(Amount Rs. in million)

Sr. No.	Name of Formations	Amount of Claim
1	Darawat Dam Project WAPDA, Hyderabad	1,818.72
2	Rainee Canal Project WAPDA, Guddu	80.00
Total		1,898.72

Non-adherence to WAPDA's Accounting and Financial Reporting Manual resulted in delayed handing over of completed projects due to non-finalization of contractor's claims of Rs.1,898.72 million¹ up to FY 2019-20.

The matter was taken up with the management in November-December, 2020 and reported to MoWR in March, 2021. The management of Darawat Dam Project replied that the contractor's claim of Rs.1,818.72 million could not be paid due to paucity of funds. The management of RCP replied that the contractor's claim of Rs.117.81 million was finalized at a cost of Rs.71.11 million and paid to the contractor.

The reply was not acceptable as contractor's claims should have been finalized before handing over the completed projects to department concerned to avoid any financial implications. Further, no record in support of claim finalization was produced to Audit by the management of RCP.

The DAC in its meeting held on November 29, 2021 directed the management to ensure finalization of account by December 31, 2021 and all relevant record be got verified from Audit. If final closure was not achieved within timelines due to any reason, the responsibility should be fixed. Further progress was not intimated till finalization of the report.

Audit recommends the management to explain reasons of delay in finalization of claims of the contractors besides implementation of DAC's directives.

(Original Para No.5.1.1)

5.1.2 Non-recovery of land acquisition cost from Provincial Governments – Rs.1,544.11 million

According to decision of 42nd meeting of the Council of Common Interests (CCI), Government of the Punjab and Khyber Pakhtunkhwa would reconcile all outstanding liabilities owed to WAPDA within a period of one month of the decision of the CCI and the duly reconciled liabilities would be cleared by the respective governments. Moreover, as per Section-9.1.3(vi) of WAPDA Accounting and Financial Reporting Manual, "A diligent effort shall be

¹ As per final accounts of EPC contractor of Darawat Dam project and monthly progress reports of Advisors (Project) in respect of Raineer Canal project

made to collect all outstanding accounts in general, invoices shall be collected as expeditiously as possible...”

During special study, it was noticed that CRBC Project was completed by WAPDA in 2003 but the same was not handed over to the Provincial Governments. Moreover, an amount of Rs.1,544.11 million on account of land acquisition cost was recoverable from respective Provincial Governments but the same was not done. Audit held that due to non-handing over of the completed project timely, WAPDA had to bear extra financial burden on account of land acquisition cost. Details are as under:

(Amount Rs. in million)

Sr. No.	Name of Formation(s)	Nature of cost	Amount
1	Punjab Government (CRBC)	Land Acquisition cost	710.34
2	Khyber Pakhtunkhwa Government (CRBC)	Land Acquisition cost	833.77
Total			1,544.11

Non-adherence to the CCI decision, cost sharing agreement and WAPDA’s Accounting & Financial Reporting Manual resulted in non-recovery of land acquisition cost amounting to Rs.1,544.11 million from Provincial Governments up to FY 2019-20.

The matter was taken up with the management in December, 2020 and reported to MoWR in March, 2021. The management replied that the adjustment of land acquisition cost was being pursued.

The DAC in its meeting held on November 29, 2021 directed Member (Water) and Member (Finance) WAPDA to take up the matter with Senior Member Board of Revenue (SMBR) and Additional Chief Secretary (ACS) Punjab to resolve the issue of handing over of CRBC project by December 31, 2021 along with the issue of unspent amount of land acquisition. Further progress was not intimated till finalization of the report.

Audit recommends the management to recover the cost of land acquisition besides expediting the handing over of projects.

(Original Para No.5.5.1)

5.1.3 Wasteful expenditure on construction of divide wall – Rs.1,180.70 million

According to Section-III(1) of WAPDA guidelines for enforcing responsibility for losses, “all losses whether of public money or of stores, shall be subjected to preliminary investigation by the officer in whose charge they were, to fix the cause of the loss and the amount involved”. Further, according to Rule-10(i) of GFR, “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 special study, it was noticed that RCP WAPDA Guddu, was completed on June 30, 2014 and DLC was issued on June 06, 2015. The construction work of extension of left divide wall at 4th bay u/s of Guddu Barrage commenced in 2008 by incurring expenditure of Rs.1,180.70 million². After completion of 1,040 ft out of total length of 1,207 ft, the Irrigation Department stopped the on-going work in April, 2009 due to which all the associated works could not be made functional. Later on, Irrigation Department demanded to demolish the constructed left divide wall at 4th bay and to construct a new divide wall at 7th bay u/s of Guddu Barrage. Audit held that due to poor planning and non-coordination with the Provincial Irrigation Department, the cost incurred on construction of divide wall at 4th bay had gone waste for which responsibility needed to be fixed (**Annex-1**).

Non-adherence to Authority’s instructions resulted in wasteful expenditure of Rs.1,180.70 million on construction of divide wall up to FY 2019-20.

The matter was taken up with the management in December, 2020 and reported to MoWR in March, 2021. The management of RCP replied that all the issues regarding the project pertaining to Irrigation Department GoS had been resolved and the project would be handed over to Irrigation Department GoS within the earliest possible time.

The reply was not tenable as it was not clear whether the wall had been completed or not and that the amount spent from the public exchequer had achieved value for money or not.

² As per letter issued by Member (Water) dated July 15, 2014.

The DAC in its meeting held on November 29, 2021 expressed displeasure to management for non-submission of comprehensive facts and directed to submit revised reply duly supported with documentary evidence to Audit within two weeks. Further progress was not intimated till finalization of the report.

Audit recommends the management to enquire the matter of wasteful expenditure for fixing responsibility upon the person(s) at fault.

(Original Para No.5.2.1)

5.1.4 Irregular award of work to sub-contractor – Rs.1,139.78 million

As per Appendix-I to tender for contract documents of the contract agreement RC-7 Vol-I of Raine Canal Project, there was no provision for work executed through sub-contractors.

During special study, it was noticed that contract No.RC-7 of RCP Guddu, for construction of main Raine Canal (Earthwork, Concrete Lining & Structure from RD 276+85 to RD 353+752) was awarded in April, 2006 to M/s Sultan Mehmood & Company (SMC) at a contract price of Rs.2,100.77 million. The contractor terminated the contract in July, 2009 due to persistent default on the part of employer. Later on, the contractor showed interest in resumption of work after withdrawing the termination notice on certain conditions. Resultantly, settlement agreement for resumption of works under Contract RC-7 was signed. As per settlement agreement, the balance work of the contract was to be executed through M/s Ramzan & Sons Limited (RSL) as sub-contractor under an irrevocable sub-contract agreement between M/s SMC & RSL. Audit held that award of remaining work amounting to Rs.1,139.78 million³ to sub-contractor was irregular as there was no provision in the contract agreement for award of work to sub-contractor. Moreover, the remaining work was required to be executed through bidding process which was also not done.

Non-adherence to the contract agreement resulted in irregular award of contract for remaining work amounting to Rs.1,139.78 million.

The matter was taken up with the management in December, 2020 and reported to MoWR in March, 2021. The management replied that the subject

³ As per summery of cost in final bill of contract RC-7

matter was enquired by General Manager (Projects) South WAPDA in compliance with decision of DAC dated February 06, 2014 wherein it was recommended that project authorities and project consultant were responsible for the loss.

The DAC in its meeting held on November 29, 2021 directed the management to submit enquiry report to CF&AO and Audit for examination. Further progress was not intimated till finalization of the report.

Audit recommends the management to enquire the matter of irregular award of work to sub-contractor and fix responsibility upon the person(s) at fault.

(Original Para No.5.7.1)

5.1.5 Non-clearance of WAPDA’s loan leading to delay in handing over of CRBC project – Rs.630.05 million

According to section-8.7.2(3) of WAPDA Accounting and Financial Reporting Manual, “On the completion of construction of a component, the Budget and Accounts Officer will satisfy himself that all liabilities in respect of that job have either been paid or provided for and that all credits relating to that job have been taken into account...”. Moreover, as per letter issued by Small Dam Organization Circle Sindh Hyderabad dated July 16, 2020, all the liabilities/claims on account of execution works must be cleared. No claim be entertained by Irrigation Department, Government of Sindh, after taking over Dam Project, clearance certificate / undertaking.

During special study, it was noticed that WAPDA financed loan of Rs.630.05 million⁴ to CRBC project during execution of works and O&M cost which was not cleared so far. Audit held that non-clearance of WAPDA’s loan caused delay in handing over of completed project to respective Provincial Governments. Moreover, CCI’s decision dated August 06, 2020 regarding reconciliation of all outstanding liabilities was required to be implemented but the same was not done despite lapse of more than one year.

Non-adherence to instructions resulted in non-clearance of WAPDA’s loan of Rs.630.05 million leading to delay in handing over of the completed projects up to FY 2019-20.

⁴ Statement of loan payable to WAPDA in respect of CRBC Project

The matter was taken up with the management in December, 2020 and reported to MoWR in March, 2021. The management stated that matter of outstanding O&M share of Rs.630.05 million from provinces was being vigorously pursued. Further progress was not intimated till finalization of the report.

The reply was not tenable as CCI's decision dated August 06, 2020 regarding reconciliation of all outstanding liabilities was required to be implemented but the same was not done despite lapse of more than one year.

The DAC in its meeting held on November 29, 2021 directed Member (Water) and Member (Finance) WAPDA to take up the matter with Secretaries Irrigation of Punjab and KP in the light of decision of CCI by December 31, 2021. Further progress was not intimated till finalization of the report.

Audit recommends the management to justify the delay in implementation of CCI's decision.

(Original Para No.5.1.2)

5.2 Impact of non-handing/taking over of WAPDA completed projects

Impact of development projects provides important lessons derived from experience of the completed projects as a result of examination of different aspects of such projects and delays occurred in handing/taking over process. In the wake of rising interest rates, inflation and scarce financial resources, the delays in completion of projects within stipulated timelines and cost overruns had negative impact for the stakeholders. This would ultimately prove increasingly detrimental to the development projects as well as cash flow plans of the Government. Thus, the need to understand the impact as a result of delays in handing/taking over of WAPDA completed projects had become more important than ever. In addition, achievement of envisaged benefits of any project also depends on its successful execution, completion within the scheduled time and finally, timely handing/taking over of completed projects. In case of any delays, the envisaged benefits could not be reaped well within the timelines and may result in lost opportunities.

Audit observed that completed projects should be handed over to respective Irrigation Department of Provincial Governments concerned

immediately after its completion. In the instant cases, the completed projects (CRBC in 2003, Darawat Dam Project and Raine Canal Project in 2014) were not handed over timely due to delay in decision making. Resultantly, WAPDA had to bear the recurring O&M cost having adverse effects on its finances and economy of Pakistan as well.

Moreover, it was not decided between the stakeholders about sharing of responsibility in case of unforeseen events after the completion. Like after the flood of 2010, the structure of Gudh Nullah was seriously damaged and due to non-handing over the control of canal, the rehabilitation works of canal, flood carrier channels and Gudh Nullah could not be started. The delays in handing/taking over also resulted in wear and tear of the infrastructure of the projects and potential extra financial burden in the shape of costs to be incurred on maintenance and remedial works.

The planned envisaged benefits could not be derived also which had long lasting financial impacts upon WAPDA and the whole economy. The financial impacts of inappropriate planning and delayed handing/taking over are further highlighted in detail in the following observations.

5.2.1 Recurring loss/non-recovery of O&M cost due to non-handing over of projects to Provincial Governments – Rs.1,434.50 million

As per 1st revised PC-I (Phase-I) of RCP, O&M of the project was responsibility of Irrigation Department, GoS. Moreover, as per 2nd revised PC-I of Darawat Dam Project, after handing over of the project works to Province of Sindh, GoS will take responsibilities of O&M. As per agreement on sharing of O&M costs for Chashma Right Bank Canal Project, the entire O&M cost of Feeder Canal & CRBC lying in NWFP shall be borne by NWFP and Punjab in the light of yardstick / work plan approved by the provinces.

During special study, it was noticed that three WAPDA projects were completed in 2003 & 2014 for irrigation and agricultural development in three provinces. An amount of Rs.1,434.50 million⁵ was incurred by WAPDA up to June 30, 2020 on account of administrative, safety, security and maintenance cost on these projects during last three to five years. Audit held that O&M

⁵ As per schedules of trial balances up to FY 2019-20

expenditure of the projects after expiry of DNP was the responsibility of the GoS, hence, incurrence of Rs.1,434.50 million was a recurring loss to WAPDA.

(Amount Rs.in million)

Sr. No.	Name of Formations	Amount
1	Darawat Dam Project WAPDA, Hyderabad	175.93
2	Rainee Canal Project WAPDA, Guddu	628.52
3	SE / PD CRBC D.I.Khan	630.05
Total		1,434.50

Non-adherence to PC-I, CCI decision, cost sharing agreement and WAPDA's Accounting & Financial Reporting Manual resulted in recurring loss/non-recovery of O&M cost due to non-handing over the projects to provincial governments amounting to Rs.1,434.50 million up to FY 2019-20.

The matter was taken up with the management in November, 2020 and reported to MoWR in March, 2021. The management of RCP replied that the matter was being vigorously pursued with GoS for handing over the project since its completion in June, 2014. Now, the 1st revised PC-I having allocation of Rs.576.52 million for rehabilitation works of the canal had been approved by ECNEC on May 26, 2021. Upon issuance and release of funds to the GoS, the project would be handed over to the Irrigation Department GoS. The management of Darawat Dam Project replied that WAPDA was persistently pursuing the matter of recovery of O&M cost with GoS. It was concluded during meeting dated April 07, 2021 with the Chairman Planning & Development GoS that Rs.163.42 million incurred on O&M cost from September 01, 2017 to June 30, 2021 would be released to WAPDA but the same was still awaited. Matter in respect of CRBC Project had already been taken up with Government for refund of operation and maintenance cost.

The reply was not acceptable because neither O&M cost had been recovered since completion of projects nor projects were handed over to GoS.

The DAC in its meeting held on November 29, 2021 directed the management of RCP to hand over the project to GoS without further delay besides submitting revised reply to Audit alongwith documentary evidence in support of their reply. DAC further directed the management of Darawat Dam

Project to vigorously pursue the case of recovery of O&M cost from GoS and submit compliance report to Audit and MoWR within 30 days. Member (Water) and Member (Finance) WAPDA to take up the matter with Senior Member Board of Revenue (SMBR) and Additional Chief Secretary (ACS) Punjab to resolve the issue of handing over of CRBC project by December 31, 2021. Further progress was not intimated till finalization of the report.

Audit recommends the management to hand over the projects to provincial governments and recover the O&M cost at the earliest.

(Original Para No.5.1.3)

5.2.2 Extra cost due to deterioration of canal lining and flood carrier channels – Rs.1,212.77 million

As per decision of Council of Common Interests (CCI) regarding handing over of control of lower portion of Chashma Right Bank Canal and supply of full share of water from CRBC to Punjab, it was decided that Government of the Punjab, Government of Khyber Pakhtunkhwa and IRSA shall meet and work out modalities to finalize a bilateral agreement between the two provinces on the proposed transfer within one month without affecting Water Accord, 1991. Moreover, as per agreement 2002, WAPDA shall work out the O&M costs of CRBC to be borne by each province. WAPDA will submit O&M cost estimates and plans to the Provinces for approval well in time. Details of O&M cost estimate should be prepared on yardstick approved by the provinces. Furthermore, O&M cost of the Flood Carrier Channels (FCC) in NWFP and Punjab shall be the responsibility of the provinces.

During special study, it was noticed that CRBC project (Stage I, II & III) was completed in 2003 at a cost of Rs.17,256.22 million. However, an amount of Rs.1,212.77 million was required for rehabilitation of flood carrier channels and lining of main canal. Audit held that due to non-handing over of the flood carrier channels and improper maintenance of canal, WAPDA had to bear extra cost on account of repair and maintenance of damaged canal lining and flood carrier channels as well as wastage of water. **(Annex-2)**

Non-adherence to the decision of CCI and agreement resulted in extra cost due to deterioration of canal lining and flood carrier channels up to FY 2019-20.

The matter was taken up with the management in December, 2020 and reported to MoWR in March, 2021. The management replied that the canal was deteriorated as a result of flood of 2010 and could not be rehabilitated due to non-issuance of requisite funds by the provinces of KP & Punjab as per cost sharing agreement 2002. CCI in its meeting held on August 06, 2020 decided to hand over the control of CRBC to respective provinces alongwith staff.

The reply was not acceptable because projects were not handed over in timely manner causing deterioration and extra rehabilitation cost.

The DAC in its meeting held on November 29, 2021 directed the management to expedite the recovery of O&M cost and implement the decision of CCI. DAC further directed to finalize the agreement with provinces for recovery mechanism by June 30, 2022 and get the record verified from Audit. Further progress was not intimated till finalization of the report.

Audit recommends the management to implement DAC's decision.

(Original Para No.5.6.1)

5.2.3 Non-execution of remedial works on Gudh Nullah super passage structure – Rs.546.95 million

According to Para-8 of Agreement on sharing of O&M costs for Chashma Right Bank Irrigation Project, “NWFP (now KP) and Punjab will ensure that adequate funds for O&M shall be made available to WAPDA”. Moreover, CCI vide its decision dated August 06, 2020 decided to hand over the CRBC to Provincial Government.

During special study, it was noticed that CRBC Project, D.I. Khan was completed in 2003. As per agreement, O&M of the canal was the responsibility of WAPDA. During flood of July 2010, the downstream structure of super passage was badly damaged and eroded the bed about 15 feet deep. Moreover, wing wall collapsed and a cavity had been formed behind the wall which damaged the drop structure at the end of Gudh Nullah super passage. An estimate of Rs.546.95 million⁶ was prepared for safety of Gudh super passage structure. Audit held that despite lapse of ten years, neither the project was transferred nor funds were taken from Irrigation Departments of Punjab & KP which resulted in

⁶ As per PC-I cost estimate of rehabilitation of Gudh Nullah super passage

non-carrying out remedial works to save the risks to the structure of downstream riparian of CRB main canal causing deterioration of public asset.

Non-adherence to agreement resulted in non-execution of remedial works amounting to Rs.546.95 million up to FY 2019-20.

The matter was taken up with the management in December, 2020 and reported to MoWR in March, 2021. The management replied that a high level meeting was held on November 26, 2020 at MoWR involving representatives of Government of Punjab and WAPDA for finalization of Draft Bilateral Agreement. Accordingly, the Draft Agreement was approved by WAPDA and submitted to Secretary Irrigation Department Punjab by MoWR.

The reply was not tenable as CCI's decision dated August 06, 2020 regarding handing over the project had not been implemented despite lapse of one year.

The DAC in its meeting held on November 29, 2021 directed the management to implement the decision of CCI and finalize the Bilateral Agreement by including the matter Gudh Nullah up to June 30, 2022; otherwise, the matter would be referred to PAC. Further progress was not intimated till finalization of the report.

Audit recommends the management to fix responsibility for delay in handing over and resultant damages to the public asset.

(Original Para No.5.6.3)

5.2.4 Inefficient project management leading to non-calibration for equitable distribution of water – Rs.15.40 million

The CCI, in its meeting held on December 23, 2019 decided to immediately introduce telemetry system to ensure actual quantity of water in the reservoirs and its releases to the provinces". Further, as per decision in high level meeting held under IRSA at Chashma dated July 07, 2020, rectification of all Regulators and Distributaries of CRBC for equitable water distribution is required, as last calibration was done in 2009 which was no more reliable.

During special study, it was noticed that an estimate of Rs.15.40 million⁷

⁷ As per letter issued by SE/PD CRBC project dated August 06, 2020

for necessary re-calibration of all heads, cross regulators and distributaries of CRBC project was forwarded to Irrigation Department KP. The calibration was necessary for equitable distribution of water and reliability of equipment installed. Audit held that delay of 11 years in calibration for equitable distribution of water had occurred due to inefficient project management as last calibration was done in 2009. Moreover, the compliance of CCI's decision dated December 23, 2019 for introducing telemetry system to ensure fair distribution of water among provinces was also required to be implemented in letter and spirit.

Non-adherence to decision of meeting resulted in non-recovery of Rs.15.40 million from Irrigation Department causing delay of 11 years in calibration for equitable distribution of water up to FY 2019-20.

The matter was taken up with the management in December, 2020 and reported to MoWR in March, 2021. The management replied that re-calibration of cross regulators and distributaries head regulators was actively being pursued with the provinces of KP & Punjab for arrangement of funds. Upon receipt of funds, the same would be communicated to ISRIP for carrying out the desired activity.

The DAC in its meeting held on November 29, 2021 directed the management to implement the decision of CCI by June 30, 2022 subject to finalization of agreement with both provinces i.e. Punjab and KP. Further progress was not intimated till finalization of the report.

Audit recommends the management to justify the delay of 11 years in calibration of all heads, cross regulators and distributaries besides ensuring compliance of CCI's decision.

(Original Para No.5.6.4)

5.2.5 Illegal lifting of water through pumps from Darawat Dam reservoir

According to Section-III(1) of WAPDA guidelines for enforcing responsibility for losses, "all losses whether of public money or of stores, shall be subjected to preliminary investigation by the officer in whose charge they were, to fix the cause of the loss and the amount involved".

During special study, it was noticed that pumps were installed illegally at bank of Darawat Dam reservoir by the local landlords for lifting water from the

reservoir. This caused stealing and wastage of reservoir water. Neither any corrective measures to eradicate the stealing of reservoir water were initiated nor any action was taken against the culprits (**Annex-3**).

Non-adherence to the Authority's instructions resulted in illegal lifting of water through pumps from the Dam Reservoir.

The matter was taken up with the management in November, 2020 and reported to MoWR in March, 2021. The management replied that local people submitted application to the project office and WAPDA higher offices for seeking permission for lifting of water for cultivation of their lands. The request was accepted and permission was accorded by project office on humanitarian grounds.

The reply was not acceptable as the pumps were installed illegally by the local land lords for lifting water from the reservoir.

The DAC in its meeting held on November 29, 2021 decided that MoWR would take up the matter with GoS for development of legal framework for water distribution and disconnection of illegal connections. Further progress was not intimated till finalization of the report.

Audit recommends the management to fix responsibility on the person(s) at fault.

(Original Para No.5.6.6)

5.2.6 Non-preparation of PC-IV and PC-V of completed projects

According to Para-1.55 of Manual for Development Projects, PC-IV form is required to be submitted at the time when the project is adjudged to be complete while the PC-V form is to be furnished on an annual basis for a period of five years by the agencies responsible for O&M of the projects. As per Section-8.7.2(7) of WAPDA Accounting and Financial Reporting Manual, "the projects undertaken and completed on behalf of outside agencies shall be transferred to the awarding Agency as per the terms of agreement". Moreover, 2nd revised PC-I of Darawat Dam Project requires that PC-III of the scheme shall be submitted to the ministry within 20 days of the closing of each quarter.

During special study, it was noticed that three projects as detailed below

were completed at a cost of Rs.45,810.24 million⁸. The completion reports (PC-IV) and annual reports of O&M for five years (PC-V) were required to be furnished by the project management upon completion of the projects as per Manual for Development Projects but the same was not done. Neither SOPs / Terms of Agreement for handing over the projects were prepared nor the projects were handed over to the Irrigation Departments. Moreover, physical targets based on PSDP allocation and monthly progress report (PC-III) of Darawat Dam Project was also required to be submitted to the Ministry within 20 days of the closing of each quarter but the same was also not done.

(Amount Rs.in million)

Sr. No.	Name of Formation(s)	Amount
1	Darawat Dam Project WAPDA, Hyderabad	8,957.89
2	Rainee Canal Project WAPDA, Guddu	19,596.13
3	SE / PD CRBC, D.I. Khan	17,256.22
Total		45,810.24

Non-adherence to the instructions of Manual for Development Projects resulted in non-preparation of PC-IV and PC-V of the projects up to FY 2019-20.

The matter was taken up with the management in November-December, 2020 and reported to MoWR in March, 2021. The management of CRBC replied that financial closure was not done due to which the PC-IV and PC-V could not be prepared. The management of Darawat Dam and Rainee Canal Project replied that PC-IV & V would be submitted to competent authority for approval.

The reply was not acceptable because as per clause-12.5 of Manual for Development Projects, the financial and operational closures were to be completed within the stipulated time but the same was not done which showed inefficient project management.

The DAC in its meeting held on November 29, 2021 directed the management for financial closure and preparation of PC-IV and PC-V of the projects followed by verification of the same from Audit. Further progress was not intimated till finalization of the report.

Audit recommends the management to implement DAC's decision.

(Original Para No.5.3.1)

⁸ As per trial balances of the projects up to FY 2019-20

5.2.7 Non-achievement of envisaged benefits

According to Clause-11.1.3 of PC-I of Darawat Dam Project regarding total project benefits, benefits from Agricultural Development and Fisheries were estimated to be Rs.3,348.70 million and Rs.776.34 million respectively. As per Clause-12 regarding Implementation Schedule, the Defects Notification Period (DNP) of three years was w.e.f. September 01, 2014 to August 31, 2017 which expired on August 31, 2017. As per PC-I of the RCP, annual agricultural benefits and other revenues were estimated to be Rs.2,359 million and Rs.115.79 million respectively. Moreover, planned completion date of the project was September, 2008 whereas Phase-I of the project actually completed in 2014.

During special study, it was noticed that two WAPDA projects were completed in 2014 at a cost of Rs.28,554.02 million for irrigation and agricultural development. The Darawat Dam Project was required to be handed over to the Provincial Irrigation Department after DNP of 2017. Moreover, Phase-I of the RCP was completed in 2014 and was ready for handing over to Irrigation Department GoS, for O&M and regulation purpose. Audit held that the completed projects were required to be handed over to the Provincial Irrigation Departments at the earliest after completion but the same was not done despite lapse of three to five years. Hence, the envisaged benefits of Rs.24,749.07 million as detailed below could not be achieved.

(Amount Rs.in million)

Name of Formations	Description	Estimated Annual Benefits	No. of Years since completion	Total Benefits
Darawat Dam Project, Hyderabad ⁹	Revenue from Fisheries	776.34	3	2,329.02
	Revenue from Agricultural Development	3,348.70	3	10,046.10
Rainee Canal Project, Guddu ¹⁰	Revenue from Agricultural Development	2,359	5	11,795.00
	Annual Revenue from water rates, income tax and fisheries	115.79	5	578.95
Total		6,599.83		24,749.07

⁹ Para-11.1.2 (Non-agricultural benefits) of 2nd revised PC-I of Darawat Dam project.

¹⁰ Para-31 (financial results for irrigation component) of revised PC-I of Rainee Canal Project.

The analysis of three completed WAPDA projects revealed that a considerable time ranging from 6 to 17 years elapsed since completion (Rainee Canal Project-2014, Darawat Dam Project-2014 and Chashma Right Bank Canal-2003) but these projects were not handed over till date. Further, the completion of the projects were also delayed from the stipulated period by 1 to 6 years. For instance, Rainee Canal to be completed in 2008 was completed in 2014, Darawat Dam Project to be completed in 2013 was completed in 2014 and Chashma Right Bank Canal to be completed in 2002 was completed in 2003. The cost comparison of these completed projects also revealed that there were cost overruns in these projects ranging from 8.86%, 270.64% and 988.98% respectively. The Rainee Canal Project was completed at a cost of Rs.20,533.84 million as per 1st revised PC-I against the original PC-I cost of Rs.18,862 million. The Darawat Dam Project was completed at a cost of Rs.11,768 million as per 2nd revised PC-I against the original PC-I cost of Rs.3,175 million. The Chashma Right Bank Canal was completed at a cost of Rs.17,097 million as per 4th revised PC-I against the original PC-I cost of Rs.1,570 million. A brief overview of above narrated facts clearly depicts that project management on the part of WAPDA was extremely inefficient which led to loss of revenues as shown in the above table.

Moreover, as per PC-I of the projects, the objectives of the projects were to provide drinking water to human beings, livestock and other animals in water scarce area of desert and to fulfil defence needs of the country by recharging obstacle pond at border area, which could not be realized. Audit held that had the projects been handed over to the provincial government, these objectives could have been achieved besides provision of substantial socio-economic uplift in the area and reduction in poverty.

Non-adherence to provisions of PC-Is resulted in non-achievement of envisaged benefits up to FY 2019-20.

The matter was taken up with the management in November, 2020 and reported to MoWR in March, 2021. The management replied that project management was continuously pursuing the matter with GoS for handing over the project to avoid such annual revenue loss.

The reply was not acceptable as the completed projects could not be

handed over to the department concerned within the timelines. Resultantly, the envisaged benefits could not be derived besides deterioration of the national assets.

The DAC in its meeting held on November 29, 2021 recognized the systemic issue and decided to take up the matter up to PAC level for finding sustainable solution under the relevant constitutional provisions for better utilization of the national resources as delays in handing over of the completed projects had occurred and opportunity cost borne.

Audit recommends the management that detailed causes of non-handing/taking over of completed projects be ascertained and responsibility be fixed for non-achievement of envisaged benefits.

(Original Para No.5.4.1)

6. Recommendations

- i. Capacity building of Provincial Government's personnel should be made part of the planning at inception stage of the project in order to prepare them for taking over the completed WAPDA projects;
- ii. Standard Operating Procedures (SOPs) for handing/taking over of completed WAPDA projects must be prepared to avoid any delays;
- iii. Responsibilities to bear O&M cost should be clearly defined at planning stage to avoid confusion in case of delay in handing / taking over of projects;
- iv. Planning stage must include a mechanism to deal with rehabilitation of damaged infrastructure due to any hazardous event/ situations after completion and before handing over of the project to avoid further deterioration;
- v. Efficiency in financial and project management should be ensured for implementation of the SOPs in order to achieve the envisaged financial and economic benefits of the projects, and

- vi. A robust mechanism needs to be developed among the executing agency of the project i.e. WAPDA and relevant Provincial Government for troubleshooting in case of any issue and to gauge the progress with respect to its completion. This would greatly facilitate timely transfer of the ownership of project to respective stakeholders.

7. Conclusion

The special study was conducted keeping in view different aspects and issues arising due to delayed handing/taking over of completed projects. It was concluded from the study that the reasons behind delayed handing/taking over of WAPDA's completed projects included recovery of land acquisition cost, lack of coordination among different departments and contractual mismanagement which created disagreement among WAPDA and provinces. Resultantly, the handing/taking over process was delayed. Besides, WAPDA suffered extra financial burden due to improper planning, obtaining of loans and restoration costs owing to deterioration of project infrastructure. Not only that the envisaged benefits could not be realized but WAPDA had to face recurring loss in the shape of O&M and administrative costs. Based on the findings of special study, audit opined that WAPDA needs to focus on efficient project management in order to avoid delays in handing/taking over of completed projects.

ANNEXURES

Divide Wall – Rainee Canal Project



Flood Carrier Channel – CRBC Project



Canal Lining – CRBC Project (Khyber Pakhtunkhwa)



Canal Lining - CRBC Project (Punjab)



**Annex-3
(Para No.5.2.5)**

Water lifting Pumps – Darawat Dam Project

