



PERFORMANCE AUDIT REPORT

ON

MIRANI DAM PROJECT, TURBAT

AUDIT YEAR 2016-17

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 Expenditure and Receipts of Government of Pakistan.

This Report is based on performance audit to examine the economy, efficiency and effectiveness aspects of Mirani Dam Project, Turbat for the period up to June, 2016. The Directorate General of Audit WAPDA conducted the performance audit of the Mirani Dam Project, Turbat during December, 2016 with a view to reporting significant findings to the relevant stakeholders. In addition, Audit also assessed, on the test check basis whether the management complied with applicable laws, rules and regulations in managing the Mirani Dam Project, Turbat.

Audit findings indicate the need for taking specific actions to realize the objectives of the Mirani Dam Project, Turbat besides instituting and strengthening internal controls to avoid recurrence of violations and irregularities.

Audit observations have been finalized in the light of discussion in the Departmental Accounts Committee (DAC) meeting.

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

Dated: 02 JUL 2018
Islamabad

Sd/-
Javaid Jehangir
Auditor General of Pakistan

TABLE OF CONTENTS

EXECUTIVE SUMMARY

SECTIONS	Page
1. INTRODUCTION	1
2. AUDIT OBJECTIVES	3
3. AUDIT SCOPE AND METHODOLOGY	3
4. AUDIT FINDINGS AND RECOMMENDATIONS	4
4.1 Financial Management	4
4.2 Procurement and Contract Management	6
4.3 Construction and Works	8
4.4 Assets Management	9
4.5 Monitoring and Evaluation	10
4.6 Environmental Impact	15
4.7 Sustainability	15
4.8 Overall Assessment	17
5. CONCLUSION	20
ACKNOWLEDGEMENT	21
ANNEXES	
Annex-1	22
Annex-2	24
Annex-3	25
Annex-4	26

Abbreviations and Acronyms

CCA	Culturable Command Area
DSO	Dam Safety Organization
ECNEC	Executive Committee of National Economic Council
EoT	Extension of Time
EPC	Engineering Procurement Construction/ Turnkey basis
FEC	Foreign Exchange Component
GoB	Government of Balochistan
GoP	Government of Pakistan
IPC	Interim Payment Certificate
ISRIP	International Sedimentation Research Institute of Pakistan
MDJV	Mirani Dam Joint Venture
MoU	Memorandum of Understanding
MoWP	Ministry of Water & Power (Government of Pakistan)
NEAC	National Engineering and Consultants
NESPAK	National Engineering Services Pakistan
PC-I	Planning Commission-I
PD	Project Director
PSDP	Public Sector Development Program
RAP	Resettlement Action Plan for the Flood 2007 affectees
WAPDA	Water and Power Development Authority

EXECUTIVE SUMMARY

The Directorate General Audit WAPDA conducted performance audit of Mirani Dam Project, Turbat in November, 2016. The main objectives of the audit were to evaluate the economy, efficiency and effectiveness of the project. The audit was conducted in accordance with the prevailing rules and regulations.

Mirani Dam Project, Turbat was included in the Vision 2025 duly approved by Executive Committee of National Economic Council (ECNEC) in a meeting held on 7th June, 2001 with initial allocation of Rs. 800 million for 2001-02. The project was approved by the ECNEC on 28th February, 2002 with a total cost of Rs. 5,811 million including foreign component of Rs. 2,297 million. The prime objective of the project was to provide irrigation water to the command area comprising 33,200 acres. The contract for construction of Mirani Dam was awarded in June, 2002 on EPC / Turnkey basis to a local firm M/s Mirani Dam Joint Venture. The project was to be completed within a period of 48 months but it was completed with a delay of one year in July, 2007. Actual expenditure incurred on completion of the project was Rs. 5,155.87 million. Despite completion of the dam in 2007, the dam site was not handed over to the Government of Balochistan, because the Government of Balochistan desired construction of an additional spillway to cope with 2007 type of flood in future.

The aspects of economy efficiency and effectiveness were evaluated through performance audit were evaluated with reference to the objectives of the project. The issues like design defect necessitating additional spillway cost after completion of the Dam, unauthentic payment to the effectees, disparity in percentage of contingencies/Engineering and administration cost did speak of the fact that cost of the project could be economized through efficient management. The matters regarding accrual of interest due to non settlement of claims, non-generation of power, non-contracting for fishing and non execution of remedial/sedimentation/ watershed works showing inefficiency on the part of management that resulted in non achieving of the optimal objectives set for the project. The time over run of one year has lessened the effectiveness of the project, thereby depriving the stakeholders of the envisaged benefits of the project.

AUDIT FINDINGS AND RECOMMENDATIONS

a. Key Audit Findings

- Unauthentic payment to the affectees as per resettlement action plan – Rs. 1,651.01 million (Para No. 4.5.1)
- Unjustified expenditure on escalation and acceleration cost – Rs. 238.51 million (Para No. 4.1.1 & 4.1.3)
- Avoidable EOT claims of the Contractor – Rs. 220 million (Para No. 4.5.2)
- Extra expenditure due to disparity in percentage of rate of Contingencies / Engineering & Administration cost – Rs. 192.55 million (Para No. 4.5.3)
- Non-execution of watershed management works – Rs. 161.65 million (Para No. 4.7.1)
- Non-development of command area for agricultural and environmental impact despite payment made to the Secretary Agriculture (GoB) – Rs. 122 million (Para No. 4.6.1)
- Non-settlement of claims of the Contractors / Consultants – Rs. 110.90 million (Para No. 4.1.2)
- Non-execution of fishing contract – Rs. 90 million (Para No. 4.5.4)
- Non-generation of power – Rs. 70.74 million (Para No. 4.2.1)
- Design defect of the dam necessitating additional spillway – Rs. 43.26 million (Para No. 4.3.1)
- Avoidable expenditure on account of consultancy services for rehabilitation action plan – Rs. 36.85 million (Para No. 4.2.2)
- Time overrun of the project by one year – Rs. 22.36 million (Para No. 4.8.1)
- Non-execution of remedial and sedimentation works – Rs. 17.25 million (Para No. 4.4.1 & 4.7.2)
- Theft of material from Dam site – Rs. 1.31 million (Para No. 4.4.2)

b. Recommendations

In view of the audit findings, following measures are recommended to improve the operational working of Mirani Dam Project:-

- To conduct an inquiry at appropriate level to fix responsibility for the defective designing of the Dam with un-gated existing spillway, necessitating additional spillways
- To rely on in-house capacity / capability of managerial and engineering services rather than outsourcing through hiring of the Consultants, as occurred in survey of Resettlement Action Plan for affecters of flood 2007
- To ensure preparation of realistic estimates and discourage issuance of subsequent variation orders causing delay as well as cost escalation of the project
- To fix responsibility of loss occurred due to theft of material
- To ensure comparison of the rate fluctuations with other contemporary projects
- To ensure early settlement of pending claims of the Contractors / Consultants
- To ensure completion of remedial works lying pending even after commercial operation and Defect Liability Period
- To ensure encashment of all the benefits associated with the project such as generation of electricity and award of fishing contract

1. INTRODUCTION

Mirani Dam Project is located across Dasht River, about 30 miles West of Turbat district in Makran Division of Balochistan Province. The Project is situated about 380 miles South-West of Quetta. It is located on the confluence of two rivers i.e. Kech and Nihing. The project area consists of Turbat, Dasht, Tump, Mand and Buleda Tehsils and part of Kolwah Tehsil. It is bounded on the North by Panjgur District, East by Khuzdar and Lasbela Districts, South by Gwadar District and West by Iran. The Culturable Command Area (CCA) of the project is about 33,200 acres. Out of this, about 12,400 acres are lying on the left bank and 20,800 acres on the right bank of Dasht River. The construction of Mirani Dam Project on Turnkey basis was signed on 2nd February, 1990, between the Government of Balochistan and the Soviet delegation for construction of project at cost of US\$ 152 million subject to approval of CDWP / ECNEC and Ministry of Finance. The Ministry of Water and Power did not accept the cost quoted by Russians. The project was approved by the ECNEC on 28th February, 2002 with a total cost of Rs. 5,811 million including foreign component of Rs. 2,297 million. The contract for construction of Mirani Dam was awarded in June, 2002 on EPC / Turnkey basis to a local firm M/s Mirani Dam Joint Venture. The project was completed in July, 2007. Actual expenditure incurred on completion of the project was Rs. 5,155.87 million.

1.1 Objectives of the Project

Following were the objectives of the project:

- To provide water for irrigation / agricultural development in the Balochistan Province
- To protect Makran Division of the Balochistan from flood
- To generate hydel power for the people of Makran Division of the Balochistan
- To produce fisheries for the people of Balochistan
- To provide water for domestic use in the lower riparian area
- To improve standard of living resulting from the increased and more varied food production and
- To ensure socio-economic uplift of the Balochistan Province.

1.2 Beneficiaries

Local community of District Kech, Turbat, Gwadar

1.3 Time Phasing

Completion of works and implementation of project were upto June 30, 2005 as per original PC-I. Instead the contract was awarded on EPC / Turnkey basis to Mirani Dam Joint Venture on June 15, 2002 with commencement date of July 8, 2002. As per Contract Agreement, the project was to be completed within 48 months but it was completed with a delay of one year in July, 2007.

1.4 Capital Cost

The cost for construction of project, as per PC-I, was Rs. 5,861 million whereas a separate PC-I for Resettlement Action Plan (RAP) for Rs. 1,687.86 million was approved.

1.5 Source of Finance

Government of Pakistan (GoP) through PSDP Budget.

1.6 Data Availability

All the data relating to execution of project was available at Project Office Mirani Dam, Turbat, award of contract at the office of General Manager (Central Contract Cell) WAPDA House, Lahore, releases and allocation of PSDP funds at the office of General Manager (Finance) Water, WAPDA House, Lahore and project co-ordination and monitoring at the office of General Manager (C&M) Water, WAPDA House, Lahore.

2. AUDIT OBJECTIVES

The main audit objectives of the project were:

- To evaluate whether the project was succeeded in achieving objectives as envisaged in PC-I
- To evaluate whether internal controls were operative and functioning effectively
- To examine whether awarding and execution of contracts were on merit and successfully executed
- To see whether payments to the Consultants were made in accordance with the provision of the agreements and Consultants fulfilled their obligations successfully
- To evaluate cost and time over run
- To evaluate issues regarding economy and efficiency in completion and operation of the project
- To assess effectiveness of the project in terms of envisaged benefits

3. AUDIT SCOPE AND METHODOLOGY

The period under review, for the performance audit, was from February, 2002 to June, 2016. During this period, total expenditure of Rs. 5,155.87 million was incurred.

Following methodology was adopted during the course of execution of performance audit:-

- Interviews and discussions with the project management
- Examination of selected project record and necessary auditable documents including:
 - PC-I of the project
 - Contract agreement
 - Consultancy agreement
 - Project Completion Report
 - Bid Evaluation Report
 - Progress Report of the project and
 - Selected cash vouchers
- Site visits

4. AUDIT FINDINGS AND RECOMMENDATIONS

4.1 Financial Management

4.1.1 Extra contractual payment on account of acceleration cost – Rs. 136.77 million

According to Contract Agreement of Mirani Dam Project, there was no provision for acceleration cost.

During performance audit of the Mirani Dam Project, Turbat it was noticed that the Contractor M/s Mirani Dam Joint Venture claimed an amount of Rs. 136.77 million on account of acceleration cost through IPC-36. It depicted that the work was not done efficiently that necessitated acceleration cost. Audit held that as the contract was awarded on EPC / turnkey basis within stipulated time frame, hence claims on account of acceleration cost, beyond the contractual provision, were not admissible.

Contract mismanagement resulted in extra contractual payment of Rs. 136.77 million on account of acceleration cost upto the financial year 2015-16.

The matter was taken up with the management in December, 2016 and reported to the Ministry in February, 2017. The management replied that no payment on account of acceleration cost was made to the Contractor as it was not directed by the Consultants. The reply was not tenable as no documents were provided to substantiate the stance.

The DAC in its meeting held on May 08, 2017 directed the management to provide the completion of the project on accelerated schedule with reference to payment of Rs. 136.77 million made beyond contract provisions.

Audit recommends that the management needs to provide completion of project on accelerated schedule with reference to payment of acceleration cost beyond contract provisions in compliance to DAC's directives.

4.1.2 Accrual of interest due to non-settlement of different claims – Rs. 110.90 million

As per Clause-4.2.63 (60.8), Part-II, Conditions of Particular Application, the amount due to the Contractor under any Interim Payment Certificate issued by the Engineer, be paid by the Employer to the Contractor within 56 days after

the Contractors monthly statements submitted to the Engineer for certification. In the event of the failure, the Employer shall pay to the contractor interest compounded monthly.

During performance audit of the Mirani Dam Project, Turbat, it was noticed that the Contractor M/s DESCON claimed an amount of Rs. 28.37 million on account of interest on delayed payments but the same was not paid / settled so far. Moreover, claims of Rs. 82.53 million were pending for want of payment to the Contractor / Consultants of the Mirani Dam Project. Further delay in this regard might result into more interest for delaying period. *(Detail is given in Table-I)*

Financial mismanagement and inefficiency resulted in non-settlement of different claims of the Contractors / Consultants amounting to Rs. 110.90 million upto the financial year 2015-16.

The matter was taken up with the management in December, 2016 and reported to the Ministry in February, 2017. The management replied that the liabilities of M/s MDJV (Rs. 66.74 million) were paid while those of Consultants were yet to be paid for want of settlement of Audit Paras / arrangement of funds through Ministry of Water & Power.

The DAC in its meeting held on May 08, 2017 directed the management to get the payment record of Rs. 66.74 million verified from Audit and expedite the payment / settlement of remaining amount. Further progress was not reported till finalization of the report.

Audit recommends that the management needs to implement the DAC's directives.

4.1.3 Unjustified payment on account of escalation on steel & steel products – Rs. 101.74 million

According to Contract Agreement of Mirani Dam Project, there was no provision for escalations, being an EPC / Turnkey basis.

During performance audit of the Mirani Dam Project, Turbat, it was noticed that an amount of Rs. 101.74 million was paid to the Contractor M/s Mirani Dam Joint Venture on account of escalation on steel & steel products through IPC-36. As the Contractor had agreed on execution of the works on EPC

/ turnkey basis within the stipulated time frame, hence these claims were not admissible. Moreover, the claims of the Contractor were not supported with rates issued by the statistical departments of Central and Provincial Governments, in the absence of which, the payment made on account of escalation could not be held authentic.

Contract mismanagement resulted in unjustified payment of Rs. 101.74 million on account of escalation on steel & steel products upto the financial year 2015-16.

The matter was taken up with the management in December, 2016 and reported to the Ministry in February, 2017. The management replied that the rates of steel were increased exorbitantly during 2004-2005. The Contractor produced documentary proof upon which the Authority approved the escalation.

The DAC in its meeting held on May 08, 2017 directed the management to get verified the record in support of reply within a week. Further progress was not reported till finalization of the report.

Audit recommends that the management needs to provide record in compliance to DAC's directives.

4.2 Procurement and Contract Management

4.2.1 Loss due to non generation of power – Rs. 70.74 million

As per PC-I of the Mirani Dam Project, annual receipts on account of Sale of Power from the Mirani Dam Project were estimated as Rs. 7.86 million.

During performance audit of the Mirani Dam Project, Turbat, it was noticed that no power house was constructed for the benefits of the local population despite lapse of nine (09) years of completion of the project causing revenue loss of Rs. 70.74 million to the WAPDA on account of prospective generation of power.

Non-adherence to the provisions of PC-I resulted in loss of Rs. 70.74 million due to non generation of power.

The matter was taken up with the management in December, 2016 and reported to the Ministry in February, 2017. The management replied that the EPC

Contractor designed the dam according to the water flow data and did not provide the Power House as the availability of water was not ensured.

The DAC in its meeting held on May 08, 2017 directed the management to provide the approval of the deletion of the power house within one week. Further progress was not reported till finalization of the report.

Audit recommends that the management needs to provide necessary approval of the competent Authority for deletion of power house in compliance to DAC's directives.

4.2.2 Avoidable expenditure on consultancy services for rehabilitation action plan – Rs. 36.85 million

According to Rule-10 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 performance audit of the Mirani Dam Project, Turbat, it was noticed that a provision of Rs. 36.85 million was made in PC-II for Rehabilitation Action Plan for the First and Second Phase. Audit held that the said Rehabilitation Action Plan should have been prepared by in-house capabilities of WAPDA in collaboration with the District Management rather than getting it outsourced through engaging the Consultants.

Non-adherence to General Financial Rules resulted in avoidable expenditure of Rs. 36.85 million on account of consultancy services for Rehabilitation Action Plan upto the financial year 2015-16.

The matter was taken up with the management in December, 2016 and reported to the Ministry in February, 2017. The management replied that to prepare the Resettlement Action Plan, a detailed topographic survey was required and expertise for land survey using imaginaries was not available with WAPDA. Moreover, with limited staff of WAPDA, the counting of houses, orchards and households was not possible.

The DAC in its meeting held on May 08, 2017 directed the management to submit revised reply with reference to original PC-I within one week. Further progress was not reported till finalization of the report.

Audit recommends that the management needs to justify the expenditure incurred on consultancy services in compliance to DAC's directives.

4.3 Construction and Works

4.3.1 Design defect of dam necessitating additional spillway – Rs. 43.26 million

As per minutes of meeting dated February 17, 2016, the Ministry of Water & Power was requested to approve the PC-II of Additional Spillway submitted by WAPDA so that the feasibility study could be carried out to ensure the safety of Dam.

During performance audit of the Mirani Dam Project, Turbat, it was noticed that the dam was completed in June, 2007 but prior to handing over the dam, the Government of Balochistan desired to construct an additional spillway to cope with 2007 type of flood in future. In this regard, PC-II for construction of additional spillway was underway with an estimated amount of Rs. 43.26 million. Audit held that design defect of the dam with ungated spill way, having no provision of auxiliary spillway, delayed the handing over of dam to the Government of Balochistan, for which responsibility needed to be fixed.

Project mismanagement resulted in design defect of the dam necessitating additional spillway at a cost of Rs. 43.26 million upto the financial year 2015-16.

The matter was taken up with the management in December, 2016 and reported to the Ministry in February, 2017. The management replied that the provision of additional spillway was made to protect the properties of the people living upstream of the dam and not for the faulty design of dam.

The reply was not tenable as no documentary evidences were provided to substantiate the stance.

The DAC in its meeting held on May 08, 2017 directed the management to investigate the matter through M/S NESPAK. Further progress was not reported till finalization of the report.

Audit recommends that the management needs to investigate the matter for fixing responsibility of design defect of the dam for non provision of

auxiliary spillway and non construction of additional spillway despite lapse of ten years.

4.4 Assets Management

4.4.1 Non execution of remedial works of the Dam – Rs. 13.25 million

As per inspection carried out by the Dam Safety Organization (DSO) WAPDA, the remedial works were required to be re-addressed.

During performance audit of the Mirani Dam Project, Turbat, it was noticed that the Dam Safety Organization (DSO) WAPDA inspected the dam site physically in the year 2014 and proposed some remedial works amounting to Rs. 13.25 million which were necessary for the safety of the dam. Despite lapse of a considerable time, no such remedial works were got done, thereby jeopardizing the essential safety of the dam.

Non-adherence to the instructions of DSO resulted in non-execution of remedial works of the dam amounting to Rs. 13.25 million upto the financial year 2015-16.

The matter was taken up with the management in December, 2016 and reported to the Ministry in February, 2017. The management replied that as the approved design of remedial works from the CDO WAPDA had been received, these works would be completed very soon.

The DAC in its meeting held on May 08, 2017 directed the management to expedite the remedial works under intimation to Audit. Further progress was not reported till finalization of the report.

Audit recommends that the management needs to expedite the execution of remedial works within possible shortest time to avoid damages to the dam.

4.4.2 Loss due to theft of material – Rs. 1.31 million

According to Section-III (1) of WAPDA Guidelines for Enforcing Responsibility for Losses due to Fraud, Theft or Negligence of Individuals, 1982 (amended up to January 2014), “all losses whether of public money or of store, 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 performance audit of the Mirani Dam Project, Turbat, it was noticed that material worth Rs. 1.31 million was stolen from Dam Site on September 02, 2013. Although, FIR was lodged with concerned Police Station but administrative inquiry / action was not taken for fixing responsibility of negligence / loss.

Non-adherence to Authority's instructions resulted in loss of Rs. 1.31 million due to theft of material upto the financial year 2015-16.

The matter was taken up with the management in December, 2016 and reported to the Ministry in February, 2017. The management replied that FIR had been lodged against unknown persons to investigate and find out the theft materials.

The reply was not tenable as no departmental inquiry was conducted to fix the responsibility and decide fate of the loss.

The DAC in its meeting held on May 08, 2017 directed the management to constitute an inquiry committee to inquire into the matter and report to Audit within one month.

Audit recommends that the management needs to inquire into the matter departmentally for fixing responsibility besides pursuing the cases with Police Authorities.

4.5 Monitoring and Evaluation

4.5.1 Unauthentic payment to the affectees – Rs. 1,651.01 million

As per Para-13(b) of PC-I Proforma (Modified) for Mirani Dam Project, "the amount of compensation funds will be allocated and transferred by WAPDA to DCO, who will pay the compensation to the concerned affectees through cheques in the payees account".

During performance audit of the Mirani Dam Project, Turbat, it was noticed that an amount of Rs. 1,651.01 million was transferred to DCO Kech for disbursement among the affectees on account of compensation but evidence of payment through cheques to the bonafide affectees accounts was not forthcoming from the record, consequently authenticity of the payment by the concerned quarters could not be ascertained.

Non-adherence to the provisions of PC-I resulted in unauthentic payment of Rs. 1,651.01 million to the affectees as per Resettlement Action Plan upto the financial year 2015-16.

The matter was taken up with the management in December, 2016 and reported to the Ministry in February, 2017. The management replied that the concerned DCO had been asked to submit the adjustment accounts or produce audit certificate thereof.

The DAC in its meeting held on May 08, 2017 directed the management to provide documentary evidences i.e. adjustment accounts to Audit within one week. Further progress was not reported till finalization of the report.

Audit recommends that the management needs to provide documents in support of the payments made to the bonafide affectees besides ensuring refund of unutilized amount from DCO Kech.

4.5.2 Loss on account of avoidable Extension of Time (EOT) claims of the Contractor – Rs. 220 million

As per Executive Summary for extension of time to M/s MDJV, authorities granted the EOT for 358 days from July 08, 2006 to June 30, 2007.

During performance audit of the Mirani Dam Project, Turbat, it was noticed that an amount of Rs. 220 million on account of EOT claims was paid to the contractor M/s DESCON by the Resettlement Committee as per report of June, 2008. The same was awarded mainly due to non-acquisition of land, before start of the said works, adjacent to the Right Bank Canal Aqueduct Cum Bridge on Dasht River. Audit held that the Engineers (Consultants) / Management were responsible for approval of the design of the project and acquisition of the land included in the project plan. The contractor should have been allowed to start work on acquisition of said land to avoid delay in works that led to the payment of EOT claims worth Rs. 220 million.

Contract mismanagement resulted in loss of Rs. 220 million on account of avoidable EOT claims of the Contractor upto the financial year 2015-16.

The matter was taken up with the management in December, 2016 and reported to the Ministry in February, 2017. The management replied that the efforts of management and extra efforts put in by the Contractor resulted in

completion of project on June 30, 2007 with a delay of 358 days only. WAPDA Authority, therefore, allowed time extension and EOT claim to the Contractor.

The reply was not tenable as the delay was occurred due to project mismanagement for which responsibility needed to be fixed.

The DAC in its meeting held on May 08, 2017 directed the management to submit a comprehensive revised reply with detailed breakup of remaining works against which EOT was granted within one week. Further progress was not reported till finalization of the report.

Audit recommends that the management needs to implement DAC's directives besides fixing the responsibility of loss.

4.5.3 Extra expenditure due to allowing comparatively higher percentage of Contingencies and Engineering & Administration – Rs. 192.55 million

According to Rule-10 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 performance audit of the Mirani Dam Project, Turbat, it was noticed that Mirani Dam Project and Darawat Dam Project were constructed under the administration of General Manager (Projects) Water South, Hyderabad. While comparing the respective PC-I of both the projects, it was transpired that there was disparity in the percentage of rates of Contingencies and Engineering & Administration as detailed below:-

Name of Project	Percentage of Contingencies	Engineering & Administration
Mirani Dam Project	5%	8%
Darawat Dam Project	3%	3%

Audit held that due to such disparity in rates of Contingencies and Engineering & Administration, WAPDA had to incur excess expenditure on the Mirani Dam Project as elaborated below:

Description	Amount provided in PC-I of Mirani Dam Project	Rationalized Amount @3% (Rs. in million)	Difference (Rs. in million)
Contingencies	164.32 @5%	98.59	65.73
Engineering & Administration	202.91 @8%	76.09	126.82
TOTAL			192.55

Non-adherence to General Financial Rules resulted in extra expenditure of Rs. 192.55 million due to disparity in percentage of rate of Contingencies and Engineering & Administration up to the financial year 2015-16.

The matter was taken up with the management in December, 2016 and reported to the Ministry in February, 2017. The management explained that the Darawat Dam was about 100 KMs from Karachi while the Mirani Dam was at a distance of 1,300 KMs from Karachi. Due to this, the Contingencies rate at Mirani Dam was on the higher side as compared to the Darawat Dam.

The DAC in its meeting held on May 08, 2017 did not agree with the management reply and directed the management to submit a comprehensive revised reply within one week. Further progress was not reported till finalization of the report.

Audit recommends that the management needs to investigate the matter for fixing responsibility of extra expenditure due to disparity in percentage of rate of Contingencies and Engineering & Administration.

4.5.4 Loss on account of non- execution of fishing contract – Rs. 90 million

As per provisions of PC-I, annual receipts on account of fishing from the Mirani Dam Project were estimated to the tune of Rs. 10 million.

During performance audit of the Mirani Dam Project, Turbat, it was noticed that contract for fishing from the dam was not awarded since its completion resulting into loss of Rs. 90 (9*10) million over a period of nine years.

Non-adherence to the provisions of PC-I resulted in loss of Rs. 90 million on account of non-contracting for fishing upto the financial year 2015-16.

The matter was taken up with the management in December, 2016 and reported to the Ministry in February, 2017. The management replied that the matter had already been taken up with the Government of Balochistan for handing /taking over the fishing area.

The DAC in its meeting held on May 08, 2017 directed the management to expedite the reply with documentary evidence within one week. Further progress was not reported till finalization of the report.

Audit recommends that the management needs to implement DAC's directives besides fixing responsibility of loss.

4.5.5 Non receipt of unspent balance from DCO – Rs. 71.87 million

As per Para-13(b) of PC-I Proforma (Modified) for Mirani Dam Project, “the amount of compensation funds will be allocated and transferred by WAPDA to DCO, who will pay the compensation to the concerned affectees through cheques in the payees account”.

During performance audit of the Mirani Dam Project, Turbat, it was noticed that an amount of Rs. 71.87 million remained un-utilized with DCO Kech. The evidence of refund /disbursement /adjustment of said amount was not forth coming from the record.

The mismanagement resulted in non refund /disbursement/adjustment of amount of Rs. 71.87 million upto the financial year 2015-16.

The matter was taken up with the management in December, 2016 and reported to the Ministry in February, 2017. The management replied that the concerned DCO had been asked to submit the adjustment accounts or produce audit certificate thereof.

The DAC in its meeting held on May 08, 2017 directed the management to provide documentary evidences i.e. adjustment accounts to Audit within one week. Further progress was not reported till finalization of the report.

Audit recommends that the management needs to provide documents in support of the payments made to the bonafide effectees besides ensuring refund of unutilized amount from DCO Kech.

4.6 Environmental impact

4.6.1 Non development of complete command area for agricultural and environmental impact despite payment to the Secretary Agriculture (GOB) – Rs. 122 million

As per PC-I of Mirani Dam Project, command area development activities were to be taken by Agriculture Department, Government of Balochistan.

During performance audit of the Mirani Dam Project, Turbat, it was noticed that a payment of Rs. 122 million was made to the Secretary Agriculture, Government of Balochistan on account of development of command area of 33,200 acres, out of which just 12,500 acres of land was reported to have been developed. This work was to be done by the Government of Balochistan, for developing the agriculture sector and better environmental impact.

Non-adherence to the provisions of PC-I resulted in non development of complete command area, besides unjustified payment of Rs. 122 million made to the Secretary, Agriculture upto the financial year 2015-16.

The matter was taken up with the management in December, 2016 and reported to the Ministry in February, 2017. The management replied that the funds amounting to Rs. 122 million were placed at the disposal of the Secretary, Agriculture Department (Government of Balochistan) on the approval of Planning and Development Division (Government of Pakistan). The reply was not tenable as no documentary evidence was provided to substantiate the stance.

The DAC in its meeting held on May 08, 2017 directed the management to provide documentary evidence regarding transfer of such funds. Further progress was not reported till finalization of the report.

Audit recommends that the management needs to provide documents in support of transfer of funds and development of command area.

4.7 Sustainability

4.7.1 Non-execution of water shed management works – Rs. 161.65 million

As per PC-I of the Mirani Dam Project, there was a provision of Rs. 161.65 million for water shed management.

During performance audit of the Mirani Dam Project, Turbat, it was noticed that an amount of Rs. 122 million was transferred to Secretary Agriculture, Government of Balochistan against the provision of PC-I for water shed management but the works there against were not forthcoming from the record. Proper execution of water shed management would have increased the sustainability of the dam by reducing sedimentation.

Non-adherence to the provisions of PC-I resulted in non-execution of water shed management works upto the financial year 2015-16.

The matter was taken up with the management in December, 2016 and reported to the Ministry in February, 2017. The management replied that the catchment area of both the Kech River and Nihing River was far flung and controlled by the rebellions. Due to law and order situation, it was not possible in such a situation to carry out the water shed management works.

The DAC in its meeting held on May 08, 2017 directed the management to provide copies of PC-1 along with approval of the design and expenditure incurred so far to the Audit for verification. Further progress was not reported till finalization of the report.

Audit recommends that the management needs to expedite execution of water shed management works besides implementing DAC's directives.

4.7.2 Non-execution of survey of sedimentation by ISRIP despite advance payment – Rs. 4 million

According to Para-9.2.2 of WAPDA Accounting and Financial Reporting Manual, "the General Manager 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 the Mirani Dam Project, Turbat, it was noticed that an amount of Rs. 4 million was paid as an advance to the ISRIP for survey of sedimentation occurring due to water flow in the reservoir as precautionary measures in 2010 but the execution of works by the concerned quarters was not done so far. Audit held that substantial delay in conducting the said survey might jeopardize the sustainability of the dam due to massive

sedimentation at a belated stage. Neither the survey was conducted nor amount of advance refunded to project authorities.

Non-adherence to WAPDA Accounting and Financial Reporting Manual resulted in non-execution of survey of sedimentation by ISRIP despite advance payment upto the financial year 2015-16.

The matter was taken up with the management in December, 2016 and reported to the Ministry in February, 2017. The management replied that the ISRIP had assured to start survey in June, 2017.

The DAC in its meeting held on May 08, 2017 directed the management to expedite the case with the ISRIP. Further progress was not reported till finalization of the report.

Audit recommends that the management needs to expedite survey of sedimentation by ISRIP to avoid any complication resulting in deterioration of dam.

4.8 Overall Assessment

Overall assessment refers to performance of project with reference to three “Es” i.e. Economy, Efficiency and Effectiveness as elaborated below.

Economy

The economy aspect of the project was affected to the extent that the issues like design defect necessitating additional spillway costing Rs. 43.26 million, unauthentic payment of Rs. 1,651.01 million to the effectees, disparity in percentage of contingencies/Engineering and administration cost of Rs. 192.55 million did speak of the fact that cost of the project could be economized through efficient management.

Efficiency

The contract for construction of the Mirani Dam Project, Turbat was awarded to the local Contractor. It was a first ever EPC / Turnkey Project constructed by a local Contractor. The engagement of indigenous expertise for construction of such like dam merits to be hailed to boost up national engineering services, thereby minimizing reliance on foreign contractors. However, certain deficiencies in the planning and construction phase outlined

below did speak of the lapses in efficiency of the project management that required to be addressed. The project was scheduled to be completed within four (4) years of time but it took five (5) years for its completion. Proper surveys / investigations were not made at the outset of the project that caused subsequent diversions / variations resulting in substantial delay in works. Despite completion of the project, the fishing benefits from the project could not be obtained with passage of ten (10) years of time, as envisaged in PC-1. Power house for generation of electricity was included in the PC-I, but deleted. If constructed, it would have enhanced the efficacy of the project. Design deficiency of non provision of auxiliary spill way caused substantial loss on account of flood 2007, subsequently necessitating additional spill way costing Rs. 43.26 million. Remedial and water-shed management works should have been completed timely to enhance the project's efficiency

Effectiveness

The effectiveness of the project can well be assessed from the fact that the project contributed in reducing just 12,500 acres of barren land into irrigated land as against the estimated irrigation of 33,200 acres land, thereby leaving 20700 acres still barren. Moreover, the time over run factor with a delay of one year has lessened the effectiveness of the project, thereby depriving the stakeholders of the envisaged benefits of the project.

4.8.1 Loss of revenue due to time over-run of one year – Rs. 22.36 million

As per Table-1 of PC-I of the Mirani Dam Project, annual receipt from the project would be Rs. 22.36 million.

During performance audit of the Mirani Dam Project, Turbat, it was noticed that PC-I of the project amounting to Rs. 5,811 million was approved by ECNEC in February, 2002 to be completed in four years of time. The contract for the construction of the Dam was awarded in June, 2002 to M/s MDJV for Rs. 4,250 million on EPC / Turnkey basis and the project was completed in June, 2007 with a delay of one year. Had the project been completed in the stipulated time frame, the Authority would have earned revenue amounting to Rs. 22.36 million in one year on account of sale of power, and water rates etc.

Non-adherence to the provisions of PC-I resulted in loss of revenue amounting to Rs. 22.36 million due to time over-run of the project by one year upto the financial year 2015-16.

The matter was taken up with the management in December, 2016 and reported to the Ministry in February, 2017. The management replied that delay was due to the law and order situation. The reply was not tenable as delay in completion of the project could not be attributed only to the incident of 2005.

The DAC in its meeting held on May 08, 2017 directed the management to submit revised reply with documentary evidence within one week. Further progress was not reported till finalization of the report.

Audit recommends that the management needs to ensure implementation to DAC's directives.

(Old Para No. 4.2.3)

5. CONCLUSION

Mirani Dam Project, Turbat was approved under WAPDA's vision 2025 program of Water Resources and Hydro Power Development. Irrigation system was handed over to the provincial government and working at a slow pace. Though, the project yielded the benefit of irrigation of command area of 12,500 acres yet an area of 20,700 acres land was still lying barren. Moreover, the project management could not manage and monitor effectively all the activities timely, resultantly envisaged benefits as per PC-I could not be achieved well in time due to the following factors:-

- Design deficiency and non provision of auxiliary
- Non execution of remedial works of dam
- Non-execution of water shed management works
- Non-execution of survey of sedimentation by ISRIP
- Non-contracting for fishing

ACKNOWLEDGEMENT

We wish to express our appreciation to the management and staff of Mirani Dam Project, Turbat for the assistance and cooperation extended to the Auditors during this assignment.

PROJECT DIGEST

Name of Project	Mirani Dam Project, Turbat						
Location of the Project	Project is located at Dasht River, about 30 miles West of Turbat in Distt. Kech						
Authorities responsible for:							
i) Sponsoring	Ministry of Water and Power (MoWP) through Government of Pakistan (GoP)						
ii) Execution	Water and Power Development Authority (WAPDA)						
iii) Operation and Maintenance:-	Water and Power Development Authority (WAPDA)						
Project Objectives	The prime objective of the implementation of Mirani Dam Project is to provide the irrigation water to the command area comprising of 33,200 acres.						
Approval of PC-Is by ECNEC	PC-I (Original) approved on 28.02.2002						
Project Completion	The Project was required to be completed within a period of 48 months on EPC / turnkey basis and works commenced on July 8, 2002 to be completed on June, 2006 and actually completed in July, 2007.						
Approved Cost of PC-I (in Million)	Local Costs Rs. 3,514 FEC Rs. 2,297 Total Rs. 5,811						
Annual Recurring Expenditure after completion (in Million)	<table><thead><tr><th>Local Cost</th><th>FEC</th><th>Total</th></tr></thead><tbody><tr><td>Rs. 55.98</td><td>-</td><td>Rs. 55.98</td></tr></tbody></table>	Local Cost	FEC	Total	Rs. 55.98	-	Rs. 55.98
Local Cost	FEC	Total					
Rs. 55.98	-	Rs. 55.98					

Source of Financing**Previous approval / anticipatory****PSDP**

A protocol of intension of the construction of Mirani Dam Project on Turnkey basis was signed between the Government of Balochistan and the Soviet delegation for construction of project at cost of US \$ 152 million subject to approval of CDWP/ ECNEC and Ministry of Finance. However, the Ministry of Water & Power did not accept the cost quoted by Russians. However, the Project was approved by ECNEC on February 28, 2002 with a total cost of Rs. 5,811 million.

CHRONOLOGY OF PROJECT HISTORY

- Project Study initiated 1966
- Reconnaissance Report (I&P Government of Balochistan) 1969
- Feasibility study carried out by WAPDA 1969 to 1974
- Feasibility study issued out by WAPDA 1974
- Feasibility study revised by WAPDA 1985
- Project Planning Report by NESPAK Sep, 1992
- PC-I Proforma prepared by P&I WAPDA July, 2001
- PC-I approved by ECNEC Feb, 2002
- Consultancy Agreement with M/s NEAC Feb, 2002
- Evaluation and Short Listing of EPC Contract Feb, 2002
- Negotiations with preferred Bidders June 04, 2002
- Award of Contract to M/s Mirani Dam Joint Venture June 11, 2002
- Commencement July 08, 2002
- Contractual date of Completion July 07, 2006
- Rehabilitation Action Plan study by NESPAK Feb, 2006
- Date of Inauguration Nov 16, 2006
- DLP 24 months

Annex-3

Final Phasing of Project

(Rs. in million)

Year	Financial Phasing (as per PC-I)	Allocation	Releases
2001-02	664	600.000	600.000
2002-03	1,261	746.000	746.000
2003-04	2,036	800.000	800.000
2004-05	1,850	1,100.000	1,100.000
2005-06	0	1,500.000	1,500.000
2006-07	0	650.000	650.000
2007-08	0	500.000	440.000
2008-09	0	(808.692)	*(803.692)
2009-10	0	150.000	45.000
2010-11	0	70.000	70.000
2011-12	0	100.000	85.000
2012-13	0	0	0
	5,811	5,407.308	5,232.31

*Charged to PC-I of Mirani RAP

The above financial data had been derived from PC-I, monthly progress reports, Trial Balance, Interim Payment Certificates available at the office of Mirani Dam Project, Turbat and General Manager (Projects) Water South, Hyderabad.

Annex-4**TABLE-1 (4.1.2)***(Rs. in Million)*

Sr. No.	Subject	Original Para No.	Amount
1.	Non-settlement of delayed payments entailing claim of interest - Rs. 28.37 million	4.2.3	28.37
2.	Non-settlement of different claims - Rs. 82.53 million	4.2.6	82.53
TOTAL			110.90