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Performance Audit Report of the Auditor-General on the Construction of Cocoa Roads



**This report has been prepared in compliance with
Article 187(2) of the 1992 Constitution of Ghana and
Section 13(e) of the Audit Service Act, 2000 (Act 584)
for submission to Parliament in accordance with
Section 20 of the Act.**

**Johnson Akuamoah Asiedu
Auditor-General
Ghana Audit Service
12 June 2023**

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TRANSMITTAL LETTER

My Ref. No. **AG.01/109/Vol.2/189**

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12 June 2023

Dear Rt. Hon. Speaker,

PERFORMANCE AUDIT REPORT OF THE AUDITOR-GENERAL ON THE CONSTRUCTION OF COCOA ROADS

I have the honour, in accordance with Article 187(2) of the 1992 Constitution of Ghana, Sections 13(e) and 16 of the Audit Service Act, 2000 (Act 584) to present to you a performance audit report on the Construction of Cocoa Roads by the Ghana Cocoa Board (COCOBOD).

2. To mitigate the challenge of the poor road conditions in cocoa-growing areas, the Government launched the Cocoa Road Improvement Programme (CRIP) in 2015 in collaboration with the Ministry of Roads and Highways with COCOBOD as the implementing agency and financier.

3. The objective was to improve 2,900km of roads to ensure the smooth and fast conveyance of cocoa beans from the farms to the purchasing centres and seaports to reduce post-harvest losses.

4. In 2020 COCOBOD awarded additional road contracts with a total length of about 4,100km for improvement in cocoa growing areas across the country. Thus, over the period 2015 to 2020, the Government of Ghana (GoG) through COCOBOD awarded a total length of 7054km of roads for improvement at a total contract sum of GH¢18.2 billion.

5. Contractors working on cocoa roads have complained about delays in payments from COCOBOD for work done which was affecting their cash flow and hence, their inability to complete the roads as scheduled. Out of a target of 7,000km of road (500 road contracts) planned for execution under the CRIP, 1,790km (115 contracts) had been completed, whilst 5,210km, (329 contracts) were ongoing and 56 contracts had been terminated as of October 2022.

6. In view of these, the Auditor General in line with Section 13e and 19 of the Audit Service Act 2000, Act 584, commissioned this Performance Audit on the Construction of Cocoa Roads to ascertain whether COCOBOD Board had ensured value for money in planning and implementing the CRIP to ensure that they served their intended purpose.

7. We examined the activities of the General Services, Finance and Administration Departments of COCOBOD in implementing the CRIP from 2015 to 2021. We reviewed documents, carried out inspections at the 14 out of 35 selected cocoa roads, and interviewed key personnel of COCOBOD, the Department of Feeder Roads, Ghana Highways, and Contractors in the selected regions. The audit covered the period from 2015 to 2021.

8. We noted that COCOBOD had taken steps to involve its subsidiaries and DFR to identify and to assist Management validate the roads for the purpose of prioritising them for implementation. Our reviews revealed that despite this initiative, they failed to prioritise the roads and therefore COCOBOD implemented more projects than its budget could support.

9. For example, CRIP I, COCOBOD awarded 234 road contracts valued at GH¢5.2 billion which was 3.25 times the GH¢1.60 billion it budgeted for whilst CRIP II COCOBOD awarded 266 contracts valued at GH¢13.0 billion which was also 9.9 times the GH¢1.31 billion it budgeted for.

10. We observed that the failure to prioritise the road projects, vis-a-vis the shortfall in funding, COCOBOD was unable to pay for works done within the time stated in the contracts which denied contractors funds to complete the works.

11. We also noted, that COCOBOD awarded 266 road contracts for CRIP II measuring a total length of 4,100km for rehabilitation, upgrading and construction in the selected cocoa growing areas, out of which, 33 contracts were through competitive bidding, 175 were through single source procurement and 58 through restricted tendering. Thus, 87% of the CRIP II road contracts were through non-competitive routes.

12. Our observation on compliance to contract specifications were that, the Consultants did not ensure contractors executed the works to the required specifications and workmanship, consequently, the completed roads have begun deteriorating and may not span the number of years expected.

13. COCOBOD could have achieved cost savings through more effective procurement management practices, better supervision, and monitoring to ensure the road projects were completed within time and specified quality.

14. I have made recommendations to COCOBOD, the details of which are in this report to bring about improvement in their activities on the roads ongoing and yet to be awarded.

15. I have also recommended COCOBOD to improve upon their method of estimation to inform decision-making.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'Johnson Asiedu', written in a cursive style.

JOHNSON AKUAMOAH ASIEDU
AUDITOR-GENERAL

THE RIGHT HON. SPEAKER
OFFICE OF PARLIAMENT
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ABBREVIATIONS

BOG	-	Bank of Ghana
CEO	-	Chief Executive Officer
CHED	-	Cocoa Heath and Extension Division
CMC	-	Cocoa Marketing Company
COCOBOD	-	Cocoa Board
CRIG	-	Cocoa Research Institute of Ghana
CRIP	-	Cocoa Road Improvement Project
DFR	-	Department of Feeder Roads
GDP	-	Gross Domestic Product
GH¢	-	Ghana Cedis
GoG	-	Government of Ghana
IPC	-	Interim Payment Certificate
ISSAI	-	International Standards of Supreme Audit Institutions
JNC	-	Junction
Km	-	Kilometre
MRH	-	Ministry of Roads and Highways
NCT	-	National Competitive tendering
PBC	-	Produce Buying Company
PFM	-	Public Financial Management
PFMR	-	Public Financial Management Regulations
PPA	-	Public Procurement Act
PPAu	-	Public Procurement Authority
QCC	-	Quality Control Company Limited
RT	-	Restricted Tendering
SDG	-	Sustainable Development Goal
SPD	-	Seed Production Division
SS	-	Single Source
USD	-	United States Dollars

EXECUTIVE SUMMARY

Introduction

The cocoa industry plays a significant role in Ghana's economy, providing livelihoods for numerous farming families and contributing significantly to the country's GDP. However, the transportation of cocoa beans from farms to purchasing centres and seaports has been hindered by poor road conditions in cocoa-growing areas, resulting in post-harvest losses. To address this issue, the Government initiated the Cocoa Road Improvement Programme (CRIP) in 2015, aiming to enhance 2,923km of roads. COCOBOD, the agency responsible for implementing and financing the CRIP, awarded contracts for the improvement of a total length of 7,054km of roads between 2015 and 2020, with a contract sum of GH¢18.2 billion.

2. In the course of the implementation of the road contracts, contractors involved in the cocoa road projects have raised concerns about delayed payments from COCOBOD, which has adversely impacted their cash flow and ability to complete the roads as scheduled.

What we did

3. We examined and assessed the planning, procurement, monitoring and payment activities of COCOBOD related to the CRIP, spanning the period from 2015 to 2021. Out of the 500 contracts awarded under the CRIP between 2015 and 2021, we selected 35 road contracts for detailed examination for the audit.

What we found

4. Despite the positive outcomes of completed cocoa roads, the audit identified areas that require improvement to ensure the sustainability of the CRIP. The findings indicate the following key issues:

COCOBOD did not prioritise identified roads to select high impact roads for implementation within limited budget.

5. COCOBOD did not prioritise road projects under the CRIP, to match amount of money available for the projects. Although COCOBOD sought input from subsidiaries and the Department of Feeder Roads (DFR) to identify critical roads, there was no evidence of proper prioritisation. This led to COCOBOD implementing more road projects than the budget for CRIP could support.

Estimates COCOBOD's obtained from their Consultants for the CRIP did not make COCOBOD provide adequate resources for the CRIP.

6. The estimates COCOBOD used for cocoa road projects were not adequate for their implementation. The estimates were made based on line diagrams instead of detailed designs. As a result, there were significant variances between estimated costs and contract sums, ranging from 4.68% to 99.7%.

COCOBOD's use of single source procurement and restricted tendering led to high costs for some of the roads contracted.

7. The majority (87%) of contracts for CRIP II were awarded through single source procurement and restricted tendering resulting in higher costs compared to contracts awarded through competitive tendering. The reasons provided by COCOBOD for using these procurement methods did not align with the requirements of the Public Procurement Act.

The Consultants did not ensure the contractors executed the works to the required workmanship.

8. Inspections revealed defects in completed roads, including potholes, disintegrating surfaces, and cracks in concrete drains. The consultants did not visit the project sites regularly and issued only a few defect notices to the contractors without follow-up for rectification. The consultants cited non-payment of fees by COCOBOD as the reason for their inadequate supervision.

COCOBOD did not ensure that road works were completed on schedule.

9. The road works in CRIP I and CRIP II experienced delays due to COCOBOD's failure to ensure timely payment to contractors. COCOBOD did not plan for alternative funding to bridge the gap and did not ensure that contractors worked diligently to complete the road works on schedule.

What we recommended

10. To enhance the effectiveness and sustainability of the CRIP, ultimately improving the transportation infrastructure in cocoa-growing areas and reducing post-harvest losses we recommended that:

- i. COCOBOD develops and implements a detailed plan and strategy to prioritise road projects based on factors such as budget, road conditions, and cocoa production areas,
- ii. General Services Department should endeavour to consult GHA and DFR for the right adjustments to be made to the estimates when budgeting for the CRIP so that adequate resources would be allocated,
- iii. COCOBOD seek expert advice to analyse procurement options and ensure better value for money,
- iv. COCOBOD prioritise supervision of the road works and provide the necessary resources to the consultants for active supervision of works and ensure rectification of defective works, and
- v. COCOBOD suspend awarding new contracts until all existing contracts are completed and paid for.

CHAPTER ONE

INTRODUCTION

1.0 Reasons for the audit

Cocoa is one of Ghana's main export commodities. It contributed GH¢3.41 billion to Gross Domestic Product (GDP) in 2022 through the production and sale of 850 thousand metric tonnes in the 2020/2021 cocoa season¹. According to Ghana Cocoa Board (COCOBOD), the cocoa industry provides livelihoods for about 850,000 farm families in Ghana².

2. Despite cocoa farmers' contribution to cocoa production and export in Ghana's economy, farmers in cocoa growing areas face problems in transporting cocoa beans due to the poor road conditions there. The poor road condition hampered the smooth transportation of bagged cocoa beans from the farms to the established bulk cocoa purchasing centres and seaports in Ghana³. For instance, Graphic online in its report by Moses Dotsey Aklorbortu on 30 September 2014 indicated that, more than 200,000 bags of cocoa beans got stuck in some cocoa producing districts in the northern part of the Western Region due to the collapse of two steel bridges and bad roads⁴.

3. To mitigate the challenge of the poor road conditions in cocoa growing areas, the Government launched the Cocoa Road Improvement Programme (CRIP) in 2015 in collaboration with the Ministry of Roads and Highways and COCOBOD as the implementing agency and financier. The objective was to improve 2,923km of roads to ensure the smooth and fast conveyance of cocoa beans from the farms to the purchasing centres and seaports to reduce post-

¹[https://www.statista.com/statistics/1235774/contribution-from-cocoa-sector-to-gdp-in-ghana/#:~:text=In%202022%2C%20cocoa%20in%20Ghana,Gross%20Domestic%20Product%20\(GDP\).](https://www.statista.com/statistics/1235774/contribution-from-cocoa-sector-to-gdp-in-ghana/#:~:text=In%202022%2C%20cocoa%20in%20Ghana,Gross%20Domestic%20Product%20(GDP).) accessed on 23/03/2023.

² <https://cocobod.gh/pages/cocoa> accessed on 24/02/2023. Kolavalli, S., & Vigneri, M. (2011). Cocoa in Ghana: Shaping the success of an economy. Yes, Africa can: success stories from a dynamic continent, 201-218.

³https://www.academia.edu/20114561/Challenges_facing_Cocoa_Production_in_Ghana accessed on 24/02/2023.

⁴<https://www.graphic.com.gh/news/general-news/cocoa-foodstuff-locked-up-due-to-bad-roads.html> accessed on 6/10/2022.

harvest losses.

4. In addition to the initial 2923km, COCOBOD in 2020 awarded more road contracts with a total length of about 4,131km for improvement in cocoa growing areas across the country. Thus, over the period 2015 to 2020, the Government of Ghana (GoG) through COCOBOD awarded road contracts with a total length of 7054km for improvement at a total contract sum of GH¢ 18.2 billion⁵.

5. Contractors working on cocoa roads under CRIP have complained about delays in payments from COCOBOD for work done which was affecting their cashflow and hence, their inability to complete the roads as scheduled. Out of a target of 7,054km of road (500 road contracts) planned for execution, with duration ranging from 12 to 36 months under the CRIP, 1,851km (163 contracts) had been completed, of the remaining 5,202km, 286 contracts were on-going, and 51 contracts had been terminated as of October 2022.

6. These concerns led to the Auditor General, to commission a performance audit on the implementation of the Cocoa Roads Improvement Programme (CRIP) by COCOBOD in line with Section 13(e) of the Audit Service Act, 2000 (Act 584).

1.2 Purpose of the audit

7. The purpose of the audit was to ascertain whether COCOBOD had efficiently and effectively planned and implemented the CRIP to ensure Value for money and to make recommendation for improvement.

1.3 Scope of the audit

8. We examined activities of the General Services, Finance and Administration Departments of COCOBOD in implementing the CRIP from 2015 to 2022. We focused on their activities related to.

⁵ This value includes GH¢ and US\$ contracts valued at an exchange rate of GH¢5.8 to 1US\$

- i. Planning for the implementation of roads in cocoa growing areas,
- ii. Procurement of contractors,
- iii. Monitoring the road contracts to ensure quality works, and
- iv. Monitoring the road contracts for timely completion.

1.4 Audit Objective

9. The objective of the audit was to determine whether COCOBOD's planned, procured and monitored activities of the CRIP to deliver quality roads that were completed on time and payments made promptly. This included determining whether COCOBOD:

- i. planned adequately for the implementation of the CRIP,
 - a. prioritised the identified roads to select high impact roads for implementation.
 - b. developed estimates for budgeting for cocoa roads.
- ii. selected contractors in a manner to achieve the most advantageous price,
- iii. ensured consultants supervised the road works to quality and
- iv. ensured works were completed on schedule.

1.5 Audit Questions and Assessment Criteria

10. Table 1 shows the audit questions, assessment criteria and sources from which the criteria were derived.

Table 1: Audit questions, assessment criteria and source

Objective	Audit Question	Assessment Criteria	Source
1a) prioritising the identified roads to select high impact roads for implementation.	Did COCOBOD prioritise to select high impact roads for improvement?	We expect COCOBOD to prioritise identified road projects to ensure it allocates the limited resources based on roads that require urgent attention due to their poor conditions to minimise time and money spent on less urgent projects.	Burek, P. (2014). Moving from strategic planning to prioritised project initiatives. (Good Practice - Project Management institute) – 2014 PMI Global Congress https://pmi.org/learning/library/moving-strategic-planning-prioritised-project-initiatives-9294#)accessed on 13 February 2023
1b) Developing estimates for budgeting for cocoa roads.	Did COCOBOD prepare estimates to enable allocation of adequate resources to facilitate the implementation of selected projects.		
2) selecting contractors for the execution of works	Did COCOBOD select contractors in a fair and competitive manner at the most advantageous price?	We expect COCOBOD to use appropriate procurement methods to select contractors to implement the CRIP	Section 40 (1) (a-d) Public Procurement Act 663 (2003) as amended by Act 914 (2016) Paragraph 5.2.3 of the Public Procurement Authority Manual (PPAuM)
3) Ensuring consultants supervise the road works to quality	Did COCOBOD ensure that road agencies supervise the works to ensure it is carried out to quality standards?	We expect COCOBOD to ensure that consultants supervise road works to quality specifications in the conditions of the contract.	Clauses 33 to 36 of the General Conditions of Contract Section 2 of Contract Specifications
4) Ensuring consultants supervise the works for completion on schedule	Did COCOBOD ensure timely completion of works?	We expect COCOBOD to ensure that consultants supervise road works to be completed on schedule	Contract Agreement

Source: Audit team review of contract documents, Public Procurement Act and Manual, and document on good practice in project planning

1.6 Audit Standards, sampling, and methodology

1.6.1 Audit Standards

11. We conducted the audit in accordance with the International Standards of Supreme Audit Institutions (ISSAIs), relevant to performance auditing. These are: *ISSAI 100-Fundamental Principles of Public-Sector Auditing*, *ISSAI 300-Fundamental Principles of Performance Auditing*, and *ISSAI (3000-3100)-Performance Audit Guidelines*. These standards require that the audit is planned and performed to obtain sufficient and appropriate evidence. It is also to

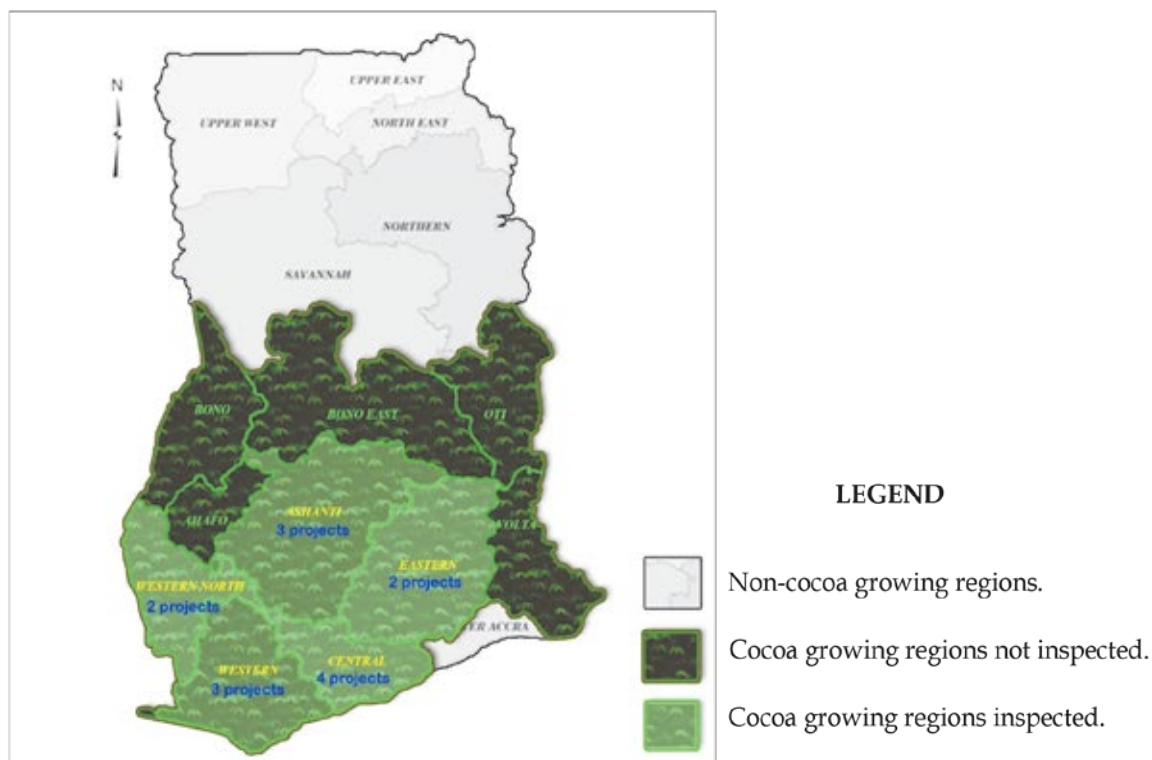
provide a reasonable basis for the findings and conclusions based on the audit objectives.

1.6.2 Audit Sampling

12. We selected 35 (647.20km) out of 500 (7,054km) road contracts awarded between 2015 and 2021 under the Cocoa Roads Improvement Programme (CRIP) for detailed examination. Appendix A shows the list of the 35 selected road contracts. The Department of Feeder Roads (DFR) supervised works on 26 of the selected road contracts and the Ghana Highway Authority (GHA) supervised nine. The 35 projects were selected from six⁶ cocoa-growing regions of the country, out of which we selected 14 road projects for inspection. The projects inspected comprised ongoing and completed projects of total length 387.40km. The combined contract sums of the 14 cocoa road projects we inspected was GH¢1.84 billion (10% of the total initial contract sum of the CRIP). Picture 1 shows the map of Ghana indicating the regions and the number of projects we inspected.

⁶ Through stratified sampling, we grouped the 10 regions into two strata, regions with high and low number of cocoa road projects respectively and selected five regions from the two strata. The regions were Ashanti, Central, Eastern, Western and Western North.

Picture 1: Map of Ghana showing the regions and number of projects inspected.



Source: Audit Service (2022)

1.6.3 Audit Methodology

13. We interviewed key persons involved in the implementation of CRIP, reviewed relevant documents on the sampled 35 road contracts, and inspected 14 out of the 35 cocoa roads projects in five regions of Ghana. This was to obtain appropriate and sufficient information to achieve the objectives of the audit.

14. In accordance with Section 29(1) of the Audit Service Act 2000, (Act 584), COCOBOD was given 30 days to respond to our observations in the Management letter per our letter dated 26 April 2023 with reference PSAD/CCRs/Vol.1/05. COCOBOD submitted its response on 8 June 2023.

Interviews

15. We interviewed Officials of COCOBOD, GHA, DFR and representatives of three contractors working on the CRIP to obtain information and understanding on the Cocoa Road Improvement Programme. We also interviewed 17 cocoa farmers, two in each region inspected. Details of the

persons interviewed and reasons for the interviews is provided in Appendix B.

Documents review

16. We reviewed documents on the CRIP to gather information relevant to the subject under review. For the sampled road contracts, we examined relevant documents on procurement, contracts awarded, monitoring and progress reports, IPCs and site meeting minutes. These reviews enabled us to assess COCOBOD’s activities in planning and implementing the projects as well as corroborate information obtained during interviews and inspections. Appendix C provides the list of documents reviewed and reasons for the review.

Inspections

17. We inspected 14 out of the 35 sampled cocoa roads in five regions to verify the existence of the roads and their conditions. We took measurements of the road width and shoulders during inspection to compare with the provisions in the contracts. We also checked for defects on completed roads during our inspections. The projects inspected are listed in Table 2.

Table 2: List of road projects inspected, location and length.

No.	Project Name	Location/Region	Length (km)
1	Amantena Inc. - Wiawso Senkye Road	Ashanti	40.3
2	Fiankoma – Hia	Ashanti	14.5
3	Manfo - Subriso – Fanti	Ashanti	18.8
4	Dunkwa - Awisem - Aboabo Road (km 34 - 55) and Twifo Praso - Aboabo Road (km0.00 - 10.00)	Central	31.0
5	Damang - Atieko - Twifo Anyinase Road (Km 0.00 - 41.0)	Central	48.0
6	Twifo Praso (Bimponagya Jn.) - Kyiaboso – Opokukrom	Central	14.5
7	Kushea - Abotareye - Akwawusu - Atweneboana Inc. (16.5km)	Central	16.5
8	Okumanin -Akokoase - Ofoase Phase 2 (km 16.70 - 32.00)	Eastern	15.3
9	Dwerebease - Kwahu - Fodoa Phase 2 (km 9.50 - 19.80) and Dwerebease-Onyemso (5.00km)	Eastern	15.3
10	Atobiase - Domama – Amponsaso	Western	11.2
11	Aboi Junction -Amoaku Junction Mumuni Road (km 0 - 45)	Western	45.0
12	Daboase - Atieku (km 7- 33)	Western	26.0
13	Enchi - Elubo Road (km 0.0 - 71.25)	Western North	71.0
14	Upgrading of Enchi-Dadieso Road (Km 30-50)	Western North	20.00
	Total length		387.40

Source: Audit review of COCOBOD project progress report of April 2022

CHAPTER TWO

THE COCOA ROAD IMPROVEMENT PROGRAMME

2.1 Historical background

18. Between 1911 and 1976, Ghana was the world's leading cocoa producer contributing 30 to 40 percent of the world's total output⁷. The Government in 1947 established the Ghana Cocoa Board (COCOBOD) as the main government agency responsible for the development of the industry. COCOBOD is a legal entity operating under the Ghana Cocoa Board Law PNDCL81, 1984.

19. The Government through COCOBOD implemented the Cocoa Roads Improvement Programme (CRIP) to facilitate transportation of cocoa beans from farmers to "take-off" centres. COCOBOD is the financier of the CRIP and implemented the Programme in two phases, CRIP I and II. Under CRIP I, COCOBOD contracted 2,923km of roads in 234 contracts for improvement in 2015 at a cost of GH¢5.20 billion. CRIP II began in 2020 with 4,131km of roads through 266 contracts at GH¢13.0 billion. Out of a target of 7,054km for execution, 1,531km was completed under CRIP I and 320km under CRIP II while works on the remaining 5,203km were ongoing or terminated as of October 2022.

20. The Civil Works Division (CWD) of the General Services Department (GSD) of COCOBOD is responsible for the implementation of the CRIP. The Department provides technical services and assists the Procurement Unit to carry out procurement of works.

⁷ <https://www.divinechocolate.com/divine-world/cocoa-and-ghana-2/> accessed on 25 May 2022

2.2 Objective of CRIP

21. The objective of CRIP was to improve 7054km of road network through upgrading, reconstruction, and rehabilitation, to facilitate the movement of people, goods and services in the cocoa growing areas.

2.2.3 Functions of COCOBOD

22. The functions of COCOBOD in relation to our audit area are as follows:

- i. Develop a consistent criterion for identification, selection, and maintenance of cocoa roads to be financed and rehabilitated,
- ii. Provide funding for the cocoa road projects, and
- iii. Manage the CRIP.

2.2.4 Laws, Policies, Regulations

23. Laws, Policies and Regulations that guide the implementation of cocoa roads include the following:

Public Procurement Act, 2003 (Act 663) as amended with (Act 914)

24. The Public Procurement Act, 2003 (Act 663) and its amendment (Act 914) outlines the procurement processes and methods used to procure goods, works and services using public funds. It regulates the procurement processes to secure a judicious, economic, and efficient use of state resources in public procurement. The Act ensures that public procurement is conducted in a fair, transparent, and non-discriminatory manner.

Public Procurement Manual, 2003

25. The manual provides guidelines and step-by-step procedures to assist procurement entities to undertake public procurement in accordance with the Public Procurement Act.

Public Financial Management Act 2016 (Act 921) and Public Financial Management Regulation 2019, LI 2378

26. The Public Financial Management Act, 2016 (Act 921) and the accompanying Regulation LI 2378 regulate the financial management of the public sector within a macroeconomic and fiscal framework. They define responsibilities of persons entrusted with the management and control of public funds, assets, liabilities, and resources. This is to ensure that public funds are sustainable and consistent with the level of public debt and provide for accounting and audit of public funds.

COCOBOD Policy Guidelines

27. This refers to Financial Policies, Regulations and Procedures applicable to COCOBOD's Head Office, Divisions and the Subsidiaries. The policy covers the Board's basic financial procedures, procurement, audit and other related financial commitments and transactions. It also outlines laws and regulations relevant to the COCOBOD's financial operations as contained in the Ghana Cocoa Board Law PNDCL81, 1984 and adherence to the Public Procurement Act and the Public Financial Management Act and Regulations.

2.3 Funding for CRIP

28. The funding of CRIP is from COCOBOD. COCOBOD awarded contracts valued at GH¢18.20 billion for the execution of 7,054km of cocoa roads from 2015 to 2021. The annual budget allocations and expenditure on cocoa roads from 2015/2016 to 2021/2022 is shown in Table 3.

Table 3: COCOBOD’s annual budget and expenditure on cocoa roads from 2015 to 2019

Year	Budget (GH¢)	Expenditure on Cocoa roads (GH¢)	Variance (GH¢)
2015/2016	570,000,000.00	800,958834.13	(230,958,834.13)
2016/2017	592,500,000.00	79,340,080.63	513,159,919.39
2017/2018	378,703,044.22	283,468,801.97	95,234,242.25
2018/2019	400,000,000.00	385,571,868.13	14,428,131.87
2019/2020	456,630574.00	654,739,461.81	(198,108,887.81)
2020/2021	456,630574.00	1,080,128,100.28	(623,497,526.28)
2021/2022	400,000,000.00	807,917,462.28	(407,917,462.28)
Total	3,254,464,192.22	4,092,124,609.23	(837,660,417.01)

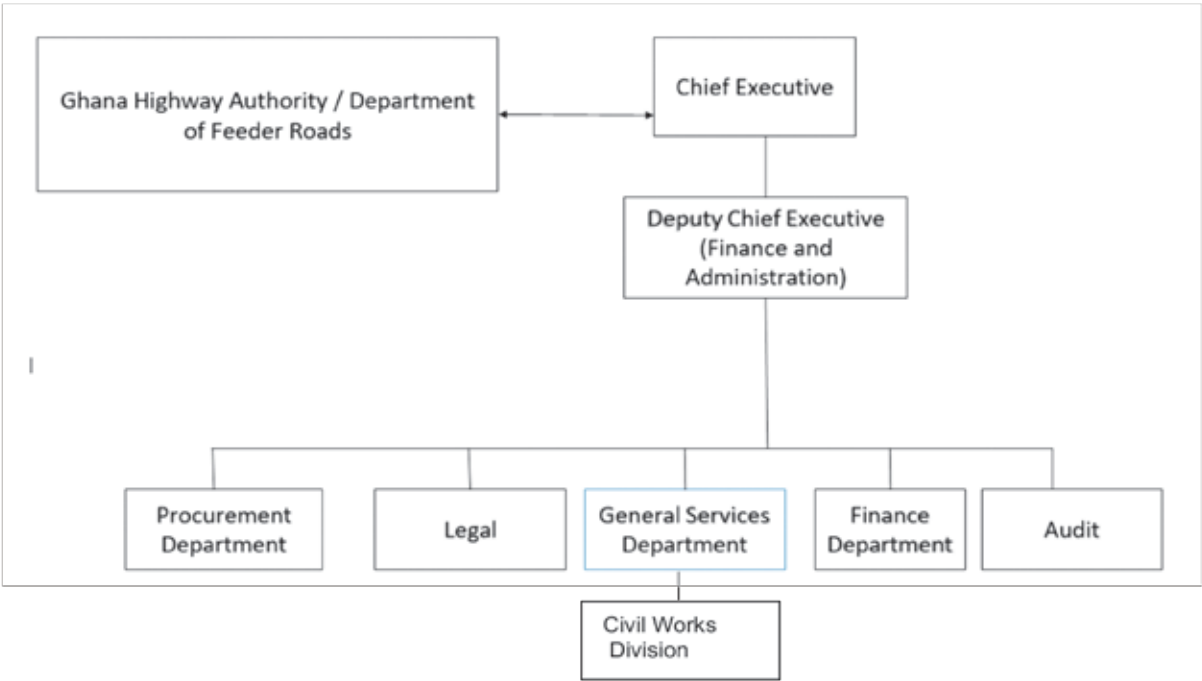
Source: COCOBOD F&A Department (2015 to 2022)

29. COCOBOD exceeded its budget by GH¢ 837.66 million for the period 2015/2016 to 2021/2022. The highest variance was in 2020/2021 where COCOBOD exceeded its budget by over 100%.

2.4 Key Players

30. Key players involved in the implementation of CRIP are the Finance and Administration Department, Procurement Unit and General Services Department. Others are the consultants from Department of Feeder Roads (Head Office, Regional Manager and Operations Team) and Ghana Highway Authority (Head Office, Regional Highway Director, Resident Engineer) and Contractors. The relationship among the key players is illustrated in Figure 1 and their roles in relation to CRIP is provided in Appendix D.

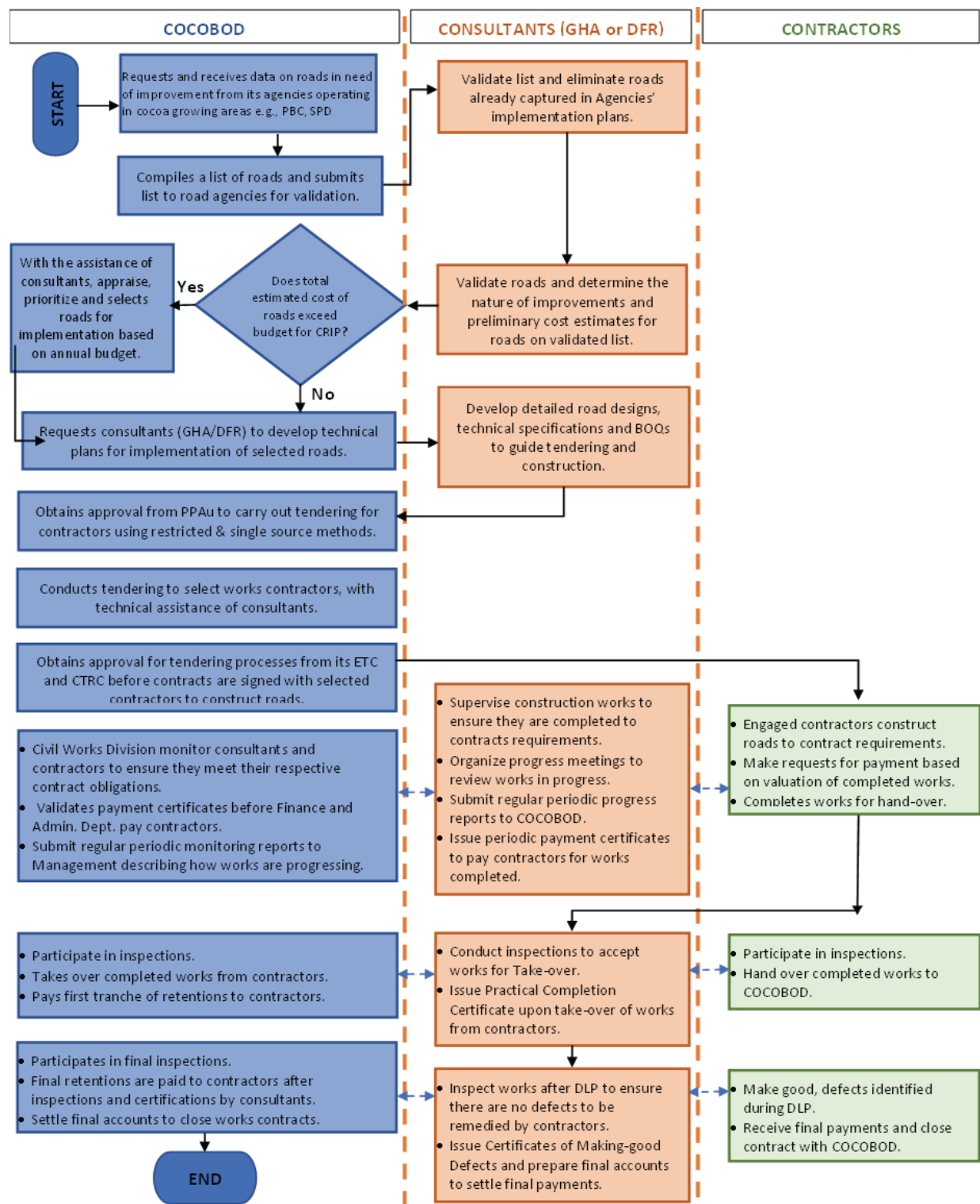
Figure 1: Relationship among key players of the CRIP



2.5 Process description

31. The process flow chart for CRIP is shown in Figure 2

Figure 2: Process flowchart for CRIP



Source: Audit review of COCOBOD activities for the CRIP

CHAPTER THREE

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

3.1 Introduction

32. COCOBOD is responsible for planning and implementing the CRIP. The roads completed under the CRIP benefited cocoa farmers in the transportation of their cocoa beans and created additional transportation links within the cocoa growing areas. Despite the benefits of completed cocoa roads, we identified areas which COCOBOD needs to improve to make the CRIP sustainable. This chapter presents our findings, conclusions and recommendations based on information COCOBOD provided and evidence gathered during the audit. The findings are grouped under the following thematic headings.

- i. Planning for the implementation of CRIP,
 - a. Prioritisation of cocoa roads for implementation.
 - b. estimates for budgeting for cocoa roads.
- ii. Procuring contractors,
- iii. Supervision of the road works to quality, and
- iv. Completion of the road works.

3.2 Planning for the implementation of CRIP

33. Planning is a key activity in any project administration when a project is envisaged to be undertaken, because through planning major decisions are made in funding and scheme of activities guided by timelines and budgets. The decision to carry out CRIP was to ensure that the project objectives were met and sustained within the available funding. We noted that COCOBOD recognising that the number of roads needing rehabilitation was many, took some initiative to consult its subsidiaries and DFR to identify, prioritise and to assist Management on how best to implement them.

34. Although this effort was made, the planning process had some pitfalls because COCOBOD could not;

1. Prioritise identified roads to select high impact roads for implementation within budget and
2. Estimates used for budgeting did not ensure adequate resources were allocated for the CRIP.

3.2.1 COCOBOD did not prioritise identified roads to select high impact roads for implementation within limited budget.

35. With limited resources, it has been good practice in management to prioritise projects to increase the success rate. Prioritisation involves listing the roads to be improved with the most important ones high up the list which will have the most impact. The factors that may influence the need to prioritise include budget, complexity, time and overall benefits. We expected that COCOBOD would prioritise the many road projects they undertook in CRIP I and CRIP II and apply their resources more effectively and obtain a higher rate of success.

36. COCOBOD did not provide information to indicate how it obtained and selected roads for implementation under CRIP I. For CRIP II, COCOBOD wrote on 11 January 2019 to its subsidiaries, Cocoa Research Institute of Ghana (CRIG), Cocoa Health and Extension Division (CHED), Seed Production Division (SPD), Quality Control Company (QCC), Cocoa Marketing Company (CMC) and Produce Buying Company (PBC) to provide them with the lists of roads critical for their operations for consideration for rehabilitation. PBC and SPD submitted roads totalling 597 from seven regions of Ghana for COCOBOD's consideration. The others did not submit any list of roads for improvements.

37. On 1 February 2019 COCOBOD solicited the help of the Department of Feeder Roads (DFR) to validate the list of the 597 roads submitted by PBC and SPD. The essence of the validation was to avoid duplication and of running multiple interventions on the same stretch of road. COCOBOD stated in its letter to DFR that it intended to use the validated list of roads to appraise and

prioritise the roads to be implemented. However, COCOBOD selected 266 out of the 597 roads for implementation under CRIP II but did not provide records to show how the selected roads were prioritised. For instance, the order in which to implement the road projects based on availability of funds, roads in very bad state and needed immediate attention and roads that serve highest cocoa production areas.

38. The General Services Director failed to prioritise the road projects for effective implementation. The Management of COCOBOD did not seek from the Director the reason he did not rank the projects for implementation.

39. Failure to prioritise the roads led to COCOBOD implementing more projects than its budget could support. For CRIP I, COCOBOD awarded 234 road contracts valued at GH¢5.2 billion which was 263% of or 3.67 times the GH¢1.94 billion it had budgeted for. For CRIP II COCOBOD awarded 266 contracts valued at GH¢13.0 billion. Out of the 266 contracts, 246 contracts valued at GH¢7.603 billion were to be implemented from 2020 to 2022. COCOBOD's allocated budget for these 246 contracts for the period 2020/2021 and 2021/2022 was GH¢856.6 million. This implies that COCOBOD would require 887% or 8.9 times its allocated budget to pay for the projects.

40. Due to the General Services Director's failure to prioritise the road projects, vis-a-vis the shortfall in funding, COCOBOD was unable to pay for works done within the time stated in the contracts which denied contractors funds when needed to continue with the works and prolonged projects beyond their contract duration.

Conclusion

41. COCOBOD involved its subsidiaries and DFR to identify and assist its Management to validate the roads for the purpose of prioritising the roads but did not prioritise.

Recommendation

42. We recommended that COCOBOD should develop and implement a detailed plan and strategy that allows its available resources to be targeted at roads selected through prioritisation for implementation.

Management response

43. *COCOBOD Management indicated that 597 roads were submitted for rehabilitation after their requests. A thorough assessment of the submitted road was done by the COCOBOD technical team with the support of the road agencies. Out of the 597 roads, 266 critical roads which were programmed to be executed over a four-year budget cycle were selected, screened and appraised based on the following:*

- Production/Tonnage,
- Economic importance/Social Amenities,
- Accessibility/Riding quality of the road, and
- Commercial activities/Connectivity to takeover centres.

44. *In addition to this, careful consultations with the Roads Minister, the various Regional Ministers and Government officials who were key stakeholders of the CRIP was done to validate the roads in a cabinet retreat held at Royal Senchi Hotel on the 5 July 2019.*

45. *This method of road appraisal falls within the ambit of the producer surplus model which is fit for purpose for COCOBOD instead of the road prioritisation methodology as suggested by the Auditors.*

Auditors' remarks

46. The auditors did not allude to the road prioritisation methodology as suggested by COCOBOD, but to prioritisation that a person will do due to scare resources. COCOBOD did not provide information on how it prioritised the roads it implemented under the CRIP nor evidence of the stakeholders retreat at Royal Senchi and the criteria used to prioritise the final list of roads. We further recommend that COCOBOD should document all processes leading to outcomes of their activities.

3.2.2 Estimates COCOBOD obtained from their Consultants for the CRIP did not make COCOBOD provide adequate resources for the CRIP.

47. COCOBOD's Budget Guidelines require the General Services Department to prepare estimates for projects for budgeting purposes to enable it secure adequate funding to meet all planned payment schedules during implementation of projects. We expected that the estimates would be prepared by cost experts in the road construction industry using sufficient information to ensure that and the variances between the estimates and the contract sums would not be excessive. Huge positive variances would mean COCOBOD would need to secure additional funding not anticipated for the project and the project could suffer delays or abandonment due to financial constraints. A huge negative variance would mean over-estimation and the excess funds could be misapplied.

48. COCOBOD indicated they obtained estimates for the sampled road contracts from the road agencies. We compiled estimates for 10 road contracts and compared with their contract sums. The variances between the estimated cost of the roads and the contract sums ranged from 4.86% to 99.70%. See Table 4 for the project estimates, contract sums and their variances.

Table 4: Project estimates, contract sum and Difference

No.	Project/Road Name	Length (Km)	Estimate (GH¢)	Contract Sum (GH¢)	Difference (GH¢)	Percentage difference
1	Upgradng of Enchi-Dadieso Road (Km 30-50)	20.00	30,000,000.00	59,910,796.12	29,910,796.12	99.70%
2	Ahenkro-Tetrem-Anyinasusu Ph. I	30.00	31,349,347.06	33,001,481.06	1,652,134.00	5.27%
3	Bit surf of Kokofu-Asaamang-Esaase	10.00	16,534,758.39	17,696,490.70	1,161,732.31	7.03%
4	Kushea-Abotareye-Akwawusu-Atveneboana Jnc. (16.50km)	16.50	22,570,056.98	23,709,375.38	1,139,318.40	5.05%
5	Awherewa-Moseaso-Antoakrom(17.00km)	17.00	22,469,880.86	24,531,844.05	2,061,963.19	9.18%
6	Dotom Jn-Dotom-Koniyaw(6.00km)	6.00	15,055,032.58	15,786,907.60	731,875.02	4.86%
7	Assin Fosu-Dunkwa Cocoa Station	6.00	22,832,054.65	24,419,523.93	1,587,469.28	6.95%
8	Jnc.4-Dikoto Saaman Feeder Road Ph. II	6.00	16,688,518.94	23,004,260.03	6,315,741.09	37.84%
9	Pensanum-Ankum-Amuni Feeder Road	28.20	43,300,000.00	59,710,801.90	16,410,801.90	37.90%
10	Subin Camp-Homahoma Feeder Road	6.50	11,170,783.00	12,103,608.82	932,825.82	8.35%
	Total	167.20	303,081,676.72	365,455,555.21	62,373,878.49	

Source: Audit review of Contract documents and request letters to PPau

49. From Table 4, the total estimates for the 10 projects were GH¢ 303,081,676.72 while the contracts awarded amounted to GH¢365,455,555.21 indicating a variance of GH¢62,373,878.48 (20.6%). We noted that the estimates for the projects were based on line-diagrams. According to the consulting road agencies, the use of line diagrams is an acceptable industry practice but has a low degree of accuracy and sometimes results in variances up to 50% of actual cost values. DFR on 1 April 2015 wrote to COCOBOD to inform them of the need to revise road estimates it had previously provided from line diagrams after it had prepared estimates based on detailed designs. For instance, DFR prepared cost estimates based on line diagrams for 38 road contracts valued at GH¢154,934,010.90. This amount was revised to GH¢ 206,359,667.92 after using detailed designs indicating a 33.2% increase in the previous estimate provided.

For the remaining projects under CRIP I and projects under CRIP II, there was no provision to revise the estimates based on detailed designs.

50. Based on the estimates, COCOBOD's allocation of funds to the CRIP was inadequate. The estimates formed the basis for the Finance and Administration Department to prepare the budget for cocoa roads, but as shown in Table 3, this was inadequate. COCOBOD from 2015/2016 to 2021/2022, budgeted GH¢3.254 billion for payment of works on the CRIP but its expenditure was GH¢4.092 billion giving a variance of GH¢0.838 billion (deficit of 25.74%).

Conclusion

51. The estimates the road agencies provided to COCOBOD did not enable COCOBOD to budget and allocate sufficient funds for the CRIP which led to excessive variances from the contract sums. COCOBOD experienced funding challenges and consequent delays on the projects.

Recommendation

52. We recommended that the General Services Department should consult GHA and DFR for update of the estimates as and when they develop detailed designs for the road to enable COCOBOD review their budgeting for the CRIP so that adequate resources would be allocated.

Management response

53. *COCOBOD Management agreed with the finding and accepted the recommendation for implementation. They indicated that the annual expenditure overrun was also due to accrued interest on delayed payment and backlog of unpaid certificates that had to be confirmed and paid during the Cocoa Roads re-organisation period. COCOBOD stated that these were unforeseen during the implementation and lessons learnt will be useful in future planning.*

3.3 Procurement of Contractors

3.3.1 COCOBOD's use of single source procurement and restricted tendering led to high costs for the roads contracted.

54. All public procurement of works must be based on value for money, having due regard to propriety and regularity. For the principle of economy in value for money evaluation, we expect that services are acquired by competition unless there are convincing reasons to the contrary. Value for money is not about achieving the lowest initial price but a competitive cost without compromise on quality of the product. We noted that non-competitive means were mostly used to acquire services of contractors for the CRIPs.

55. COCOBOD's procurement policy stipulates that all procurement activities are to be in line with the Public Procurement Act 663 (2003) as amended by Act 914 (2016) and any other enactment by the Public Procurement Authority (PPAu).

56. Section 40 (1) (a-d) of the Public Procurement Act 2003 (Act 663) allows the use of single source procurement method when there is exclusivity, urgency, emergency, continuity, and compatibility subject to the approval of the Public Procurement Authority. This method is used to procure works from one selected supplier/contractor without competition even though there may be other suppliers that can carry out the works. Effective use of non-competitive eliminates the need for a lengthy procurement process, which can save time and reduce cost of evaluating numerous tenders. Abuse of it leads to overpricing of contracts.

57. According to paragraph 5.2.3 of the Public Procurement Authority Manual (PPAuM) an entity may use restricted tendering for procurement of works if:

- the requirement is of a specialised nature or has requirement of public safety or public security which make an open competitive tender inappropriate,

- the requirement is of urgent nature and hence open competitive tender is not practical,
- the number of potential contractors is limited and
- An open competitive tender has failed to bring an award of contract.

58. COCOBOD awarded 266 road contracts for CRIP II measuring a total length of 4,131km for rehabilitation, upgrading and construction in cocoa growing areas. Out of the 266 contracts awarded, 33 were through competitive bidding, 175 were through single source procurement and 58 through restricted tendering. Thus, 87% of the CRIP II Road contracts were not procured through open competitive route.

59. From our sample of 35 contracts, COCOBOD procured eight through National Competitive Tendering (NCT), 18 through Restricted Tendering (RT) and nine through Single Source (SS). We compared the contract sums of six contracts procured through NCT with another six from the sample procured through RT and SS methods that had similar characteristics in terms of geographical location, asphalt type/specifications, length, scope and were awarded in the same year (2020). We observed that the projects procured through NCT yielded lower costs per kilometre as shown in Table 5.

Table 5: Comparison of NCT with RT and SS

No.	Project/Road Name	Region	Procurement Method	Length (Km)	Contract Sum (GH¢)	Cost/Km (GH¢/Km)	Ratio
1	Wassa Akropong-Adansi Ph. I	Western Region	NCT	6.00	9,171,673.94	1,528,612.32	1:2.5
	Jnc.4-Dikoto Saaman Feeder Road Ph. II	Western Region	RT	6.00	23,004,260.03	3,834,043.34	
2	Akontombra-Assieso & Others Ph. II (Km 7.0)	Western North Region	NCT	7.00	17,669,376.62	2,524,196.66	1:1.78
	Tie Nyamesem-Kwame Mensah & Others Ph. II	Western Region	SS	7.00	31,500,000.00	4,500,000.00	
3	Asaastre-Gyampre Jn.Ph. II	Western Region	NCT	8.00	6,376,797.82	797,099.73	1:3.03
	Nsawora-Yawkrom Feeder Road Ph. I	Western North Region	RT	8.00	19,341,201.66	2,417,650.21	

No.	Project/Road Name	Region	Procurement Method	Length (Km)	Contract Sum (GH¢)	Cost/Km (GH¢/Km)	Ratio
4	Akontombra-Assieso & Others Ph. I (Km 0-9.7)	Western North Region	NCT	9.70	10,445,714.00	1,076,877.73	1:2.46
	Baiwakrom Jn-Missiba	Western North Region	SS	9.80	25,940,068.93	2,646,945.81	
5	Fante Nyankomase-Jakai-Framase Jn. (Km 11.00-16) Ph. II	Central Region	NCT	6.00	15,326,644.38	2,554,440.73	1:1.59
	Assin Fosu-Dunkwa Cocoa Station	Central Region	RT	6.00	24,419,523.93	4,069,920.66	
6	Jakai-Nyamebebu Jn.Ph. II	Central Region	NCT	6.50	11,777,253.38	1,811,885.14	1:2.05
	Breman Asikuma-Asebem-Anyinabrem Road Ph. I	Central Region	RT	6.50	24,200,000.00	3,723,076.92	

Source: Audit team review of COCOBOD project files (July 2022)

60. Although the use of RT and SS saved COCOBOD the time it would have taken to evaluate a large number of tenderers, our analysis showed that these methods cost COCOBOD about 100% more than the use of NCT in terms of cost/kilometre of road. From Table 5, we deduced that roads procured under NCT were one and halve to three times cheaper than what COCOBOD got for roads procured using single source or restricted tendering.

61. COCOBOD indicated in its request letters to PPAu for approval for single source procurement and restricted tendering that, the works on the cocoa roads were urgent, that the contractors selected were in proximity to the project locations and had experience in executing similar works. The reasons adduced by COCOBOD to the Public Procurement Authority for approval for single-sourcing and restricted tendering did not meet all the requirements of the Public Procurement Act. COCOBOD indicated in its request to PPAu that the works were urgent but did not indicate the conditions necessitating the urgency.

62. For eight of the 35 road contracts which COCOBOD provided records of start and completion dates, we found that all had gone beyond their expected completion dates as shown in Table 6. These roads had delayed from seven to 61 months as of 31 October 2022 defeating the explanation of urgency.

Table 6: List of projects COCOBOD termed as urgent but had delayed as of 31 October 2022

No	Project Name	Award date	Contract period (months)	Start date	Expected completion	Actual Completion	Period delayed (months)
1	Construction of Aboi junction - Amoako junction- Mumuni road	23-Jun-16	18	4-Aug-16	3-Aug-19	Not completed	39
2	Bitumen surfacing of Atobiase-Domama-Aponsaso Feeder Road (11.2 Km)	23-Jun-16	12	28-Sept-16	27-Sept-17	Not completed	61
3	Resealing of Ahenkro - Tetrem - Anyinasusu Phase 1 (30.0km)	3-Oct-16	24	16-Nov-16	10-Nov-18	Not completed	47
4	Surfacing of Dotom Koniyaw Feeder Road (6.0km)	4-Oct-16	12	17-Nov-16	16-Nov-17	Not completed	59
5	Bitumen surfacing of Ahwerewa-Moseaso-Antoakrom	24-Oct-16	12	5-Dec-16	4-Dec-17	Not completed	59
6	Construction of Sefwi Wiawso Akontombra Road (km 15.0 - 56.0)	24-Oct-16	30	19-Dec-16	18-Dec-19	Not completed	34
7	Bitumen surfacing of Kokofu-Asamang-Esaase feeder	29-Dec-16	12	3-Feb-17	2-Feb-18	24/09/2020 (Delayed completion)	31
8	Rehabilitation and upgrading of Dunkwa - Awisem junction Road (34.50km)	16-Jan-20	24	9-Mar-20	10-Mar-22	Not Completed	7

Source: Compiled by Audit team from review of CRIP Files.

63. According to the PPAu Manual, the proximity of a Contractor to the location of the road project is not a factor for single sourcing or restricted tendering. The experience of the contractor for road works is a requirement for all procurement routes. Notwithstanding, PPAu approved all COCOBOD's requests to use single source procurement and restricted tendering. Our

analysis showed that the cost of works procured using RT/SS were more than those procured through NCT, even though NCT took more time and resources to evaluate and select a contractor.

64. We attributed the lack of obtaining economy in COCOBOD's procurement to their negligence in analysing the procurement routes available to them and making the best choice to obtain value for money.

Conclusion

65. COCOBOD did not rigorously analyse its procurement options for value for money but sought approval from PPAu for single sourcing and restricted tendering thus, procuring contracts which were up to three times more expensive than they could have obtained through competitive tendering.

Recommendation

66. We recommended that Management of COCOBOD should seek expert advice to help them analyse the procurement options that will best suit their situation and will provide them with value for money.

Management Response

67. *The cost of a road is driven by factors such as terrain, type of intervention, functional classification of the road, price fluctuation, scope, among others. Table 5 compares roads of similar lengths; without recourse to the above-mentioned factors and uses deviations from NCT procured roads and cost/km as the tools for analysis.*

68. *Thus, using mode of procurement and cost/km for analysis for roads from differing terrains, interventions, functional classification, scope among others introduces errors in the conclusions made. The analysis tool used thus cost/km and procurement route for projects from differing terrains among other factors leads to incorrect conclusions.*

Auditors' remarks

69. Our analysis on cost per kilometre was based on contract sums and considered roads with similar characteristics in terms of geographical location, asphalt type/ specifications, length, scope and awarded in the same year (2020). The use of cost per kilometre is therefore a reasonable basis of comparing cost of roads obtained through NCT with that from RT/SS as all other factors mentioned by COCOBOD were considered in our analysis.

3.4 Supervision of road works to quality.

3.4.1 The Consultants did not ensure contractors executed the works to the required workmanship.

70. Supervision is required to ensure that works are carried out to specification in quality, and scope. A project implementing agency that lacks the expertise to supervise, will normally engage a consultant to manage the contractual relationship between client and contractor in meeting the contract requirement. Based on the consultant's advice, payments are made to honoured certificates raised, while the consultants give the assurance that works are executed to the desired specification. GHA and DUR were appointed consultant for COCOCOB for the CRIP.

71. We noted in the projects we sampled and inspected, that the consultant did not ensure that quality standards were met.

72. Clause 33 to 36 in the General Conditions of Contract gives guidance to the project consultant to control quality of works, identifying defects for correction by the contractor. Section 2 of the Specifications in the contract document specifies the required level of workmanship. We visited 14 out of the 35 sampled roads to ascertain whether the roads were free of defects.

73. From our inspections, we found many defects some of which are shown in Pictures 2 to 6. The bitumen surface on completed roads had potholes and

portions of the surface disintegrating (rutting and ravelling). There were also cracks in concrete drains. These defects indicate that the consultants (DFR and GHA) who supervised the works did not ensure the achievement of high quality of the works although they had the capability. The consultants did not visit the project sites as often as they should. They issued few defect notices to the contractors for rectification of the defects, but the consultants did not follow up to ensure the contractors adhered to their instructions. The consultants informed us that COCOBOD had not released the expected funds for supervision, therefore, they were unable to visit the project sites as required. For example, in 2021, COCOBOD released GH¢10 million instead of GH¢32 million to GHA for supervision. Table 7 presents defects we identified on the completed roads.

Table 7: Defects identified on completed roads.

No.	Project Name	Defects
1	Fiankoma – Hia	Potholes at some sections of the road.
2	Manfo - Subriso – Fanti	Potholes at some sections of the road.
3	Kushea - Abotareye - Akwawusu - Atweneboana Jnc. (16.5km)	Potholes, portions of the surface showing disintegrating bitumen (raveling). cracks in concrete drains.
4	Dwerebease - Kwahu - Fodoo Phase II (km 9.50 - 19.80) and Dwerebease-Onyemso (5.00km)	Potholes and portions of the road surface disintegrating exposing gravel layer (rutting and raveling). Edges of road and crossovers deformed.
5	Daboase - Atieku (km 7- 33)	Potholes.
6	Upgradng of Enchi-Dadieso Road (Km 30-50)	Potholes.

Source: Audit team inspection of cocoa roads, September 2022.

74. Consequently, the completed roads have begun deteriorating and may not span the number of years expected. The conditions of sections of the roads inspected are shown in Pictures 2 to 6 and other observations on the uncompleted works are shown in Pictures 7 to 10 in Appendix E.

Picture 2: Deteriorated road surface of a section of Dwerebease-Kwahu--Fodoa Ph. II road from CRIP II one year after construction



Picture 3: Deteriorated road surface of a section of Dwerebease-Kwahu--Fodoa Ph. II road from CRIP II one year after construction



Picture 4: Deterioration at the start of Kushea - Abotare-Akwawusu-Atweneboana Junction road from CRIP I completed in 2019 (3 years after completion)



Picture 5: Pothole developing on a section of Kushea - Abotare-Akwawusu-Atweneboana Junction Road from CRIP I completed in 2019 (3 years after completion)



Picture 6: Pothole developing on a section of Enchi-Dadieso road (km 30-50) from CRIP I



Source: Audit team field inspection (September 2022)

Conclusion

75. COCOBOD and the two Consultants were not diligent in ensuring that the road works were executed to the expected quality of workmanship.

Recommendations

76. We recommended that COCOBOD should:
- a. provide the resources agreed with the consultants to enable active supervision of ongoing works, and
 - b. ensure that all defective works associated with uncompleted road contracts under CRIP are corrected.

Management Response

77. *Some of the road projects mentioned have been completed and handed over to the road agency for their periodic and routine maintenance programmes. Maintenance for such works is under the Government of Ghana. COCOBOD will engage the Ministry of Roads and Transport to ensure that adequate maintenance plans are put in place.*

3.5 Completion of road works.

3.5.1 COCOBOD did not ensure that all road works were completed on schedule.

78. To ensure that projects are completed on schedule for use, management and the projects team must put in measures to ensure timely completion of the work. The measures should be able to determine whether the project is being managed against the baseline completion time set. In addition, there should be a process for reviewing and comparing planned to actual project progress and that appropriate steps are taken to mitigate delays. For eight of the projects that we assessed an average of 42 months behind schedule was observed.

79. The completion period for the road contracts were from 12 months to 36 months depending on the complexity of the works and the length of the road. We expected that the consultants and COCOBOD would ensure that the contractors work diligently to complete the works on, before or within any extension of time granted.

80. Out of the 234 road contracts in CRIP I expected to be completed by December 2018, 95 were uncompleted as of 31 October 2022. For CRIP II, 247 road contracts were expected to be completed by 30 April 2022 but 237 remained uncompleted as of 31 October 2022. Five out of the 14 road projects inspected had gone beyond their expected completion dates. Table 8 shows the list of roads inspected, their expected completion date and actual completion where applicable as of September 2022.

Table 8: List of roads we inspected, their expected completion date and actual completion where applicable as of September 2022.

No.	Project Name	Contract period	Expected Completion	Actual Completion	Delay	Status
1	Fiankoma – Hia	18	8-Aug-17	***		Completed
2	Manfo - Subriso – Fanti	18	20-Dec-16	***		
3	Kushea - Abotareye - Akwawusu - Atweneboana Jnc. (16.5km)	12	28-Nov-17	***		
4	Dwerebease - Kwahu - Fodoa Phase 2 (km 9.50 - 19.80) and Dwerebease-Onyemso (5.00km)	24	10-Aug-22	17-Jun-21		
5	Daboase - Atieku (km 7-33)	18	13-Nov-16	13-Feb-17		
6	Upgradng of Enchi-Dadieso Road (Km 30-50)	18	23-Nov-16	***		
7	Amantena Jnc. - Wiawso Senkye Road	30	6-Jul-23	-	Nil	First seal
8	Dunkwa - Awisem Aboabo Road (21km)	24	6-Nov-18	-	46 months	Clearing and formation
9	Damang - Atieko - Twifo Anyinase Road (Km 0.00 - 41.0)	24	16-Apr-22	-	5 months	Clearing, cutting, and filling and formation level,
10	Twifo Praso (Bimponagya Jn.) - Kyiaboso – Opokukrom	24	10-Aug-22		1 month	Clearing, cutting, and filling, construction of u-drains and pipe culverts
11	Okumanin -Akokoase - Ofoase Phase 2 (km 16.70 - 32.00)	24	17-Feb-23	- -	Nil	Clearing completed, Formation level, construction of concrete u-drains and pipe culverts
12	Atobiase - Domama - Amponsaso	12	27-Sep-17	-	60 months	Clearing completed, Formation level,
13	Aboi Junction -Amoaku Junction Mumuni Road (km 0 - 45)	18	3-Aug-19	- -	38 months	Clearing completed, Formation level,
14	Enchi - Elubo Road (km 0.0 - 71.25)	42	1-Jan-24		Nil	Clearing, cutting, and filling, construction of box and pipe culverts

*** COCOBOD did not provide data

Source: Audit team field inspection (September 2022)

81. We examined the five delayed projects to ascertain the reasons they had

delayed and what COCOBOD was doing to get the contracts completed. We found that the contracts had delayed because of delay in honouring Interim Payment Certificates (IPCs) by COCOBOD.

82. COCOBOD explained that the roads had elapsed their completion times because of failure of the contractors to keep to the construction timelines. The contractor's representatives we interviewed in Western, Central and Eastern Regions explained that COCOBOD had delayed in paying for completed works to improve their cashflows to carry on with outstanding works as they had exhausted the monies available to them.

83. According to Sub-Clause 14.7 of the Contract Data, COCOBOD should pay contractors amounts certified by the Consultants within 42, 90 and 120 days from the date the Employer approves each invoice depending on the contract agreement.

84. We noted that payments for works done on projects delayed for a minimum of 22 to a maximum of 547 days as shown in Table 9. The delay in payments was due to COCOBOD implementing many contracts without having the corresponding funds to complete them within the contract periods. We found that, contract sums for the CRIP (500 road contracts) totalled GH¢18.2 billion but COCOBOD budgeted GH¢3.254 billion to pay for the works. This has left a deficit of GH¢14.946 billion (about four times the budget) for COCOBOD to bridge. Although COCOBOD was aware of the funding gap, they have not planned for alternative funding to bridge the gap. Lack of adequate funding increased the period COCOBOD took to honour contractor's IPCs.

Table 9: Average delay in days for IPCs paid beyond the contractual payment period.

Name of project	No of IPCs Paid	No. of IPCs Delayed	Contractual payment period (A)	Average time taken to pay (B)	Average Delay after payment period (C=B-A)
			Days		
Ahenkro - Tetrem - Anyinasusu Phase 1	7	3	90	343	253
Fiankoma – Hia	3	1	90	596	506
Pokukrom - Ahwerewam-Sabronum Feeder Road	9	4	90	304	214
Manfo - Subriso – Fanti	3	1	90	290	200
Kokofu Asaamang - Esaase	8	8	91	379	259
Atebubu-Kwame Danso-Kojo Krom Road (km 30-65)	13	5	90	439	349
Dunkwa - Awisem Aboabo Road (21km)	4	2	90	379	289
Kushea - Abotareye - Akwawusu - Atweneboana Jnc. (16.5km)	9	5	90	305	215
Dunkwa - Awisem - Aboabo Road (km 34 - 55) and Twifi Praso - Aboabo Road (km0.00 - 10.00)	4	1	90	637	547
Twifo Praso (Bimponagya Jn.) - Kyiaboso - Opokukrom	3	1	90	115	25
Sefwi Wiawso - Akontombra Road (km 15.0 - 56.0)	9	8	90	477	378
Benchema Junction (Barrier) - Adwofua Road (km 0-38)	8	6	42	64	22

Source: Audit review of Contract Documents, IPCs and COCOBOD payment data

85. Delayed payments had dire effect on contractors regarding resources needed to diligently implement the works which affected the completion time of the road projects and in some cases, contractors abandoning the works.

Conclusion

86. COCOBOD’s delay in paying IPCs was the key factor in the delay of completing the road contracts. COCOBOD did not seek alternative arrangements to secure additional funds to pay for the works.

Recommendations

87. We recommended that Management of COCOBOD should complete and pay for all remaining 337 road contracts under CRIP before embarking on new ones.

Management Response

88. *Management of COCOBOD agreed with the finding and accepted the recommendation for implementation.*

3.6 Overall Conclusion

89. While COCOBOD's idea of supporting the improvement of roads in cocoa growing areas is laudable, COCOBOD did not apply the challenges and lessons learnt in the implementation of CRIP I to the planning, procuring contractors and executing CRIP II. Overall, the CRIP had deficiencies in its planning, budgeting, procurement processes, and quality control as well as timely completion of the projects.

90. COCOBOD could have achieved cost savings through more effective procurement management practices, better supervision, and monitoring to ensure the road projects were completed within time, quality and cost.

91. The recommendation in this report will ensure that the CRIP and other future infrastructure works by COCOBOD are well planned and executed to achieve better value for money.

APPENDICES

APPENDIX A

List of 35 selected projects

No.	Project/Road Name	Length (Km)	Contract Sum (GHC)	Consultant	Region	Contractor	Procurement Method
1	Upgrading of Daboose-Atieku Road (Km 7-33)	26.00	66,958,538.46	GHA	Western	Green House Int. Dev't (GH) Ltd.	RT
2	Upgrading of Enchi-Dadieso Road (Km 30-50)	20.00	59,910,796.12	GHA	Western North	G.S. Inter. Dev. (GH.) Ltd	RT
3	Ahenkro-Tetrem-Anyinasusu Ph. I	30.00	33,001,481.06	DFR	Ashanti	Reggio Company Ltd	RT
4	Manfo-Subriso-Fanti	18.80	17,843,939.01	DFR	Ashanti	Kofi Job Company Ltd.	RT
5	Fiankoma-Hia	14.50	20,506,862.21	DFR	Ashanti	Lomenf Co. Ltd	RT
6	Bit surf of Kokofu-Asaamang-Esaase	10.00	17,696,490.70	DFR	Ashanti	Ousman Inusah Ventures Ltd.	RT
7	Kushea-Abotareye-Akwawusu-Atveneboana Inc. (16.50km)	16.50	23,709,375.38	DFR	Central	Knapo Const. Ltd.	RT
8	Construction of Aboi Junction-Amoaku Junction- Mumuni Road (km 0-45)	45.00	190,315,868.34	GHA	Western	Kofi Job Company Ltd.	RT
9	Construction of Sefwi Wiawso-Akontombra Road (km 150-56.0)	41.00	169,998,629.16	GHA	Western North	G.S. Inter. Dev. (GH.) Ltd	RT
10	Upgrading of Dunkwa-Awisem Aboabo Road(21Km)	21.00	71,580,465.62	GHA	Central	Knapo Const. Ltd.	RT
11	Awherewa-Moseaso-Antoakrom(17.00km)	17.00	24,531,844.05	DFR	Ashanti	Dupoash Ltd.	RT
12	Dotom Jn-Dotom-Koniyaw(6.00km)	6.00	15,055,032.58	DFR	Ashanti	Kamsad Const. Co. Ltd.	RT
13	Atobiase-Domama-Amponsaso	11.20	12,520,867.72	DFR	Western	New Case Properties & Investments Limited	RT
14	Fante Nyankomase-Jakai-Framase Jn. (Km 11.00-16) Ph. II	6.00	15,326,644.38	DFR	Central	Hydnomics Ltd.	NCT
15	Jakai-Nyamebebu Jn.Ph. II	6.50	11,777,253.38	DFR	Central	Nana Nyarko Ent.Ltd.	NCT
16	Breman Asikuma-Asebem-Anyinabrim Feeder Road (Km0.00-9.00) Ph.1	6.06	18,107,976.16	DFR	Central	Hyway Guangdong Gh. Ltd.	NCT
17	Assin Fosu-Dunkwa Cocoa Station	6.00	24,419,523.93	DFR	Central	Maripoma Ent. Ltd.	RT
18	Twifo Praso (Bimponagya Jn.)-Kyiaboso-Opokukrom	14.50	44,078,228.36	DFR	Central	Eon Eng.Solution	SS
19	Damang-Atieku-Twifo Anyinase Road (Km 0.00-41.0) &Daboose Junct-Atieku Rd (Km 59.0-66.0)	48.00	269,432,640.30	GHA	Central	Justmoh Construction Limited	SS-CO- FINANCE

No.	Project/Road Name	Length (Km)	Contract Sum (GH¢)	Consultant	Region	Contractor	Procurement Method
20	Asaastre-Gyampre Jn.Ph. II	8.00	6,376,797.82	DFR	Western	Medmo Co. Ltd.	NCT
21	Wassa Akropong-Adansi Ph. I	6.00	9,171,673.94	DFR	Western	Doncross Ventures	NCT
22	Jnc.4-Dikoto Saaman Feeder Road Ph. II	6.00	23,004,260.03	DFR	Western	Kintoh Ltd.	RT
23	Pensanum-Ankum-Amuni Feeder Road	28.20	59,710,801.90	DFR	Western	Cephas K. Const.Works	RT
24	Tie Nyamesem-Kwame Mensah & Others PhII	7.00	31,500,000.00	DFR	Western	Volta Impex Ltd.	SS
25	Akontombra-Assieso & Others Ph. I (Km 0-9.7)	9.70	10,445,714.00	DFR	Western North	A. Amako Co.Ltd.	NCT
26	Akontombra-Assieso & Others Ph. II (Km 7.0)	7.00	17,669,376.62	DFR	Western North	Cephas K. Const.Works	NCT
27	Nsawora-Yawkrom Feeder Road Ph. I	8.00	19,341,201.66	DFR	Western North	Ofh Western Homes	RT
28	Baiwakrom Jn-Missiba	9.80	25,940,068.93	DFR	Western North	Budsum Co. Limited	SS
29	Construction Of Enchi-Elubo Road (Km0.00-71.25)	71.00	673,416,360.72	GHA	Western North	Top International Eng. Gh. Ltd	SS-CO-FINANCE
30	Construction Of Benchema Junction (Barrier)-Adwofua Road (Kmo-38)	38.00	250,100,282.84	GHA	Western North	Amandi Investment Ltd.	SS-CO-FINANCE
31	Dwerebease-Kwahu-Fodoo Feeder Road Ph. II (Km9.50-19.80) And Dwerebease-Onyemso(5.00km)	15.30	58,468,681.37	DFR	Eastern	Nag Fairmount Co. Ltd.	SS
32	Okumanin-Akokoase-Ofoase Phase 2 (Km16.70-32.00)	15.30	47,188,334.59	DFR	Eastern	Marifusions Services Limited	SS
33	Subin Camp-Homahoma Feeder Road	6.50	12,103,608.82	DFR	Ashanti	Mansass Ltd.	RT
34	Amantena Inc. -Wiawso-Senkye Road	40.30	231,691,113.98	GHA	Ashanti	O2Tko.Ltd.	SS-CO-FINANCE
35	Upgrading Of Ntonso Inc. -Amadu Nkwanta-Tetekwao Feeder Road Ph. II (Km:7.0-14.0)	7.00	11,986,189.16	DFR	Ahafo	B.K. Nsiah & Co. Limited	NCT
		647.16	2,594,886,923.30				

Persons interviewed and reasons for interview.

Interviewee	Reasons for interview
COCOBOD	
Director General Services	understand the concept of the Cocoa Road Improvement Programme and how they have ensured that competent contactors were procured at the best price
Project Engineers	how they have ensured that works were executed within time, cost and to quality specifications
Project Quantity Surveyors	how they have ensured works were executed within cost and to quality specifications
Ghana Highway Authority	
Regional Highway Directors	obtain information on their role in relation to supervision of the cocoa roads
Resident Engineer	
Department of Feeder Roads	
Regional Manager	
Operations Manager	
Contractors Representatives	gather information on challenges in relation to their construction works.
Cocoa farmers	how implementation of the roads has contributed to conveying their cocoa beans to the purchasing centres.
Assemblymen	

Documents reviewed and reasons for the review.

Documents Reviewed	Reasons for Review
Tender Documents	To know the instructions to tenderers, qualification criteria, tender data, specifications, bill of quantities, drawings, tender price pertaining to each project.
Tender Evaluation Report	To know how the tenders were evaluated, the constitution of the evaluation panel and how the successful tenderer was selected
Contract Documents	To know the details of the contract agreement, acceptance by the contractor, provision of appropriate securities, conditions of contract, specifications and when the project is to be completed.
Award & Acceptance Letters	To know if successful tenderer were issued with award letters, contract sum indicated for the projects and completion period of the project.
Correspondence	To obtain information on decisions and actions taken on the cocoa road projects.
Test results	To know the tests that were conducted on material components and to corroborate with test requirements of the contract.
Minutes of site meetings	To gather information on issues discussed, decisions taken, and instructions issued at site meetings. To also know how often site meetings are held for the cocoa road projects.
Progress report on Cocoa Roads	To know the status of implementation of the cocoa road projects
Payment Vouchers	To know if payments were authorized, memos raised and approved, warrants were issued and whether payments were pre-audited and appropriate VAT invoices were issued. We also gathered information on when payments were made, amount paid on the cocoa road projects and whether payments made were commensurate with work done.
Interim Payment Certificates	To know the amounts the PM certified for payment at each stage, monitoring reports attached, measurement of works done by PM before payment, status of the project at the time of the certificate.

APPENDIX D

Key players and their roles

Key Players	Roles
Finance and Administration Department, COCOBOD	To obtain information on how funds were obtained for the road projects, payment procedures, time of payments, and reasons for delayed payments.
Legal Department	Review legal issues including contracts entered into by COCOBOD with contractors
Audit	Audit of financial transactions of the COCOBOD including payment for cocoa roads
General Services Department, COCOBOD	To understand and obtain clarification on issues related to the implementation of the project as well as understand their role in the initiation, procurement, Implementation and monitoring of the cocoa road projects.
COCOBOD Zonal Engineers	To obtain information on their activities in monitoring the works of the Consultants in implementing the cocoa road projects.
COCOBOD Zonal Quantity Surveyors	To obtain information on their activities in monitoring the works of the Consultants in implementing the cocoa road projects.
Department of Feeder Roads (Head Office)	To obtain information on their activities as consultants on the cocoa road projects and their role in procuring the contractors for the cocoa road projects.
Department of Feeder Roads (Regional Manager and Operations Team)	To obtain information on their activities in supervising the works of the contractors in implementing the cocoa road projects.
Ghana Highway Authority (Head Office)	To obtain information on their activities as consultants on the cocoa road projects and their role in procuring the contractors for the cocoa road projects.
Ghana Highway Authority (Regional Highway Director)	To obtain information on their activities in supervising the works of the contractors in implementing the cocoa road projects.
Ghana Highway Authority (Resident Engineer)	To obtain information on their activities in supervising the works of the contractors in implementing the cocoa road projects.
Contractors	To obtain information on reasons for the delay in completion of the projects

APPENDIX E

Pictures of examples of poor workmanship observed on road projects inspected.

Picture 7: Poor concrete workmanship on head wall of retaining wall constructed at a section of Okumanin - Akokoase - Ofoase Phase 2 (km 16.7 - 32.0) - CRIP Phase II



Picture 8: Poor workmanship on retaining constructed at a section of Amantena junction -Wiowso - Senkye road - CRIP Phase II



Picture 9: Poor workmanship on 1200mm double pipe culvert on Okumanin -Akokoase - Ofoase Phase 2 (km 16.70 - 32.0) - CRIP Phase II



Picture 10: Honeycombs in u-drain patched with mortar at a section of Amantena junction -Wiowso - Senkye road - CRIP Phase II



Source: Audit team field inspection (September 2022)

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