[PROCUREMENT AUDIT REPORT - WACCI]

April 20, 2020



UNIVERSITY OF GHANA

West Africa Centre for Crop Improvement (WACCI)



PROCUREMENT AUDIT REPORT

For the Period August, 2018 to March, 2020

WORLD BANK AFRICAN CENTRE OF EXCELLENCE (ACE) PROJECT [IDA Credit Number 5415-GH]

Submitted By

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APRIL, 2020

Batong and Khalid

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List of Abbreviations

ACE – African Centre of Excellence CIPS – Chartered Institute of Procurement and Supply CPS – Country Procurement Systems CS – Consulting Services DI – Direct Invitation EMP - Environmental Management Plan GDS - Goods GHS - New Ghana Cedis **GPN** – General Procurement Notice ICC – International Chamber of Commerce INCOTERMS - International Rules for the Interpretation of the Trade Terms MCIPS – Member of Chartered Institute of Procurement and Supply NCS – Non Consulting Services NCT - National Competitive Tendering PPB - Public Procurement Board PPA – Public Procurement Authority PB – Performance Bond PDMSD – Physical Development and Municipal Services Directorate PG – Performance Guarantee PQ - Price Quotation PU – Procurement Unit RFQ – Request for Quotations SBD's - Standard Bidding Documents SPN – Specific Procurement Notice STD – Standard Tender Documents TOR – Terms of Reference UCS – Use of Country Systems UoG - University of Ghana

WKS – Works

WACCI - West African Centre for Crop Improvement

WB – World Bank



The Head Procurement Unit University of Ghana Post Office Box LG 52 Legon, Accra Ghana

Dear Sir/Madam,

LETTER OF TRANSMITTAL:

CONSULTANCY SERVICES FOR PROCUREMENT AUDIT OF THE TWO (2) ACES WORLD BANK PROJECTS - WACCI AND WACCBIP (IFT No. UG/RFP/ACE/03/2020)

With reference to your request for the provision of Consultancy Services for Procurement Audit – Consultant to carry out the Procurement Audit of the 2 ACES (WACCI) from August, 2018 to March, 2020 for the University of Ghana and in accordance with the consultancy contract agreement between Messrs Suleman Abdul - Razak (Procurement Specialist Consultant) and the University of Ghana (Client); find herein the procurement audit report for your attention, please.

This report outlines the methodology used for conducting the procurement audit, the examination of general procurement documentations, procurement performance assessment and rating, procurement risk assessment and rating and detailed examination of specific procurement contracts within the period 1st August, 2018 to 31st March, 2020. It also highlights the key findings and recommendations after the Procurement Audit Assignment.

We remain,

Yours faithfully,

S. A. Razak Batong (Team Leader) Procurement Specialist and Quantity Surveyor Email: <u>maara44@gmail.com</u> Tel: 0240269339/0269262307



Tel. 0240269339/0269262307

The Head Procurement Unit University of Ghana Post Office Box LG 52 Legon, Accra Ghana

Dear Sir/Madam,

<u>CONFLICT OF INTEREST DISCLOSURE:</u> <u>CONSULTANCY SERVICES FOR PROCUREMENT AUDIT OF THE TWO (2) ACES WORLD BANK</u> <u>PROJECTS - WACCI AND WACCBIP (IFT No. UG/RFP/ACE/03/2020)</u>

We the undersigned executing the assignment - Consultancy Services for the Engagement of Procurement Audit Consultant for Procurement Audit of 2 ACEs for the University of Ghana African Centre of Excellence (ACE) World Bank Project in Ghana, hereby affirm as follows:

- That we are not associated, nor have been associated in the past, directly or indirectly, with the supervising consultant/employer/procurement agent of client (as defined accordingly) or any other entity that has prepared the design, specifications, and other documents for purposes of procurement contracts at the Centre;
- 2. That, none of our proposed team members/agents/subsidiaries/sub-consultants are associated, nor have been associated in the past, directly or indirectly, with the supervising Consultant/employer/procurement agent of client (as defined accordingly) or any other entity that has prepared the design, specifications, and other documents for purposes of procurement contracts at the Centre; and
- 3. That, we have not contacted the employer/procurement agent of client during the expression of interest/proposal period.

We understand that a firm that has been engaged by the Employer to provide consulting services for the preparation or supervisions of the Architectural and Engineering Services

assignment, and any of its affiliates, shall not be eligible to express interest for the Procurement Audit assignment.

Furthermore, we understand that consultants shall not have a conflict of interest, and that consultants found to be in conflict of interest shall be disqualified. Consultants shall be considered to have a conflict of interest with one or more parties in this procurement process, if they:

- a. Have controlling shareholders in common; or
- b. Receive or have received any direct or indirect subsidy from any of them; or
- c. Have the same legal representative for purposes of this assignment; or

d. Have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on another Tender, or influence the decision of the Procurement Unit regarding this assignment.

We remain,

Yours faithfully,

S. A. Razak Batong (Team Leader) MGhIS, MFIG, MAAQS, Assoc.RICS, (Procurement Specialist and Quantity Surveyor) Email: <u>maara44@gmail.com</u> Tel: 0240269339/0269262307

STATEMENT OF DECLARATION

We have evaluated the stated procurement contracts in accordance with instructions and terms of reference given to us, and are satisfied that, from the records and explanations given by the University of Ghana African Centre of Excellence - West Africa Centre of Crop Improvement (WACCI), this procurement Audit Report represents a true and fair view of the procurement contracts audited and provides a reasonable basis for our opinion.

The procurement audit was conducted for the period August, 2018 to March, 2020 procurement plan year for the ACE's Centre (copy of procurement plan attached as appendix 1).

In our professional judgment as Procurement and Contracts Management Specialists, sufficient and appropriate procurement audit procedures have been conducted and evidence gathered to support the accuracy of the conclusion provided and contained in this report. The procurement audit conclusion is based on a comparison of the conditions, as they existed at the time, against pre-established procurement audit criteria that were submitted in our technical proposal for the assignment agreed upon by the client. The conclusion is applicable only to the procurement entity examined - WACCI.

The evidence was gathered in compliance with Ghana's Public Procurement Law (Act 663 as amended) and the World Bank policies, guidelines and standards on procurement of goods, works, non-consulting services and consulting services.

RESPECTIVE RESPONSIBILITIES OF PARTIES

This procurement audit report is the responsibility of the University of Ghana African Centre of Excellence - WACCI.

Our responsibility is to express an independent opinion on the evaluated procurement contracts based on and limited to records and explanations provided and made available to us by the African Centre of Excellence Centre - <u>WACCI.</u>

S. A. Razak Batong Procurement Specialist Dated: May 14, 2020.

Diyaudeen M. Khalid Procurement Specialist Dated: May 14, 2020.

0 EXECUTIVE SUMMARY

0.1 Introduction

The West African Centre for Crop Improvement (WACCI) at the University of Ghana was established to contribute towards the apparent shortage of plant breeders in West and Central Africa. The World Bank African Centre of Excellence (ACE) funding for the Centre will provide the springboard for transforming WACCI into sustainable African Centre of Excellence for training plant breeders, Seed Scientists and Technologists.

0.2 Aim of Procurement Audit Assignment

To review and comment on the processes and procedures engaged by the Centre in the implementation of Procurement activities and functions.

0.3 Methodology of Assignment

The assignment commenced with an Entry Conference at the Centre with the Procurement Unit. General documentations of the Centre (Credit Agreements, Performance and Financing Contract, Revised Implementation Plans, Environmental, Health and Safety Management Plans, Procurement Plans) were studied and evaluated for compliance.

Review of specific procurement contract files together with field visits, stores visits, physical examination and inspection of procurement contracts was done.

0.4 Sampling of Contracts for Audits and Audit Tools

0.4.1 Sampling Technique

Sampling of the contracts audited was done through Simple Random Sampling of procurement contracts based on a Simple Stratified (Cluster) Sampling Technique. This was used to arrive at 30% sample of the procurement contracts.

0.4.2 Population

The table below (table 1) provides the total procurement contract packages to be used for sampling.

					rocurem	nent M	etho	d	Туре	e of Pro	ocuren	nent
ID	No. of procurement Packages	30% sample	Sample Size	NCT	RFQ	ICT	SS	RT	GDS	WKS	CS	NCS
WACCI	23	6.9	7	11	13	0	0	0	23	0	0	0
WACCI-Rev	24	7.2	7	11	13	0	0	0	23	0	1 ^a	0
30% Sample					3.9	0	0	0	6.9	0	0.3	0
Selected Sample for Audit 7				3	4	0	0	0	7	0	0*	0

Table 1 Population of Contract Packages

*One consulting service contract – procurement audit of the Center was not selected

^aUpdate of procurement plan to add procurement audit contract to total sample

0.4.3 Consideration

The sample was representative but considered among other things; various categories of procurement (Goods, works, non-consultancy services and consultancy services), size of procurement, procurement audit period (August, 2018 to March, 2020), method of procurement (NCT, PQ, SS, RT, DI etc) and status (on-going and completed).

0.4.4 Type of Procurement Contracts

A total of seven (7) procurement contract packages with a total value of GHS 2,952,011.52 were sampled and audited. The sample audited comprised of seven (7) goods procurement contracts valued at GHS 2,952,011.52 (100%), with no works procurement contract and no consulting and non-consulting contracts. See table 2 below

Table 2 Type of Procurement Contracts

	Type of Procurement		Percentage (%)
ID	Contract	Total Value	
1	Goods	2,952,011.52	100.00
2	Works	0.00	0.00
3	Consulting Services	0.00	0.00
4	Total	2,952,011.52	100.00

0.5 Scope of Procurement

The table below (table 3) provides the total scope of procurement contracts audited for the period August, 2018 to March, 2020 after sampling.

The seven (7) contract packages comprised of a total of thirteen (13) Lots of Procurement Contracts.

Table 3 Scope of Audit

ID	ENTITY	CONTRACT NO	PROCUREMENT CONTRACT	SUCCESSFUL BIDDER	CONTRACT AMOUNT(GHS)	PROCUREMENT METHOD USED	PROCUREMENT TYPE	STATUS
1	WACCI	UG/AURG/WACCI/GD/ NCT/002B/2018	Supply and Installation of Generator Sets	G&J TECHNICAL SERVICES	744,519.00	NCT	GOODS	COMPLETE
2	WACCI	UG/AURG/WACCI/GD /NCT/003/2018	Supply and Installation of 8 Person Elevator	MS CONSULT LTD	223,890.00	NCT	GOODS	COMPLETE
3	WACCI	UG/W/AACE-WACCI/ NCT/02006/2017	Supply and Installation of Bioinformatics Equipment - High Performance Server	BLINK STAR TECHNOLOGY LTD	496,749.69	NCT	GOODS	COMPLETE
4	WACCI	UG/G/ACE-WACCI/ NCT/02006A/2017	Supply and Installation of Epson LCD Multimedia Projectors (6pcs)	GOODWIL SUPPLIES	21,714.00	RFQ	GOODS	COMPLETE
5	WACCI	GR/UOG/ACE-WACCI/ 02006/2017	Supply and Installation of Computers - Lot 1 (19 Pcs)	IT MARKET LTD	96,900.00	RFQ	GOODS	COMPLETE
6	WACCI	GR/UOG/ACE-WACCI/ 02006/2017	Supply and Installation of Computers - Lot 2 (5 Pcs)	IT MARKET LTD	44,500.00	RFQ	GOODS	COMPLETE
7	WACCI	UG/G/ACE-WACCI/RFQ/ 02009/2017	Supply and Installation of Lecture, Conference and Meeting Room Furniture	GRACE FILLED VENTURES	99,000.00	RFQ	GOODS	COMPLETE
8	WACCI	UG/ACE-WACCI/GD/NCT/ 02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 1	ARCOA GHANA LTD	454,594.76	NCT	GOODS	COMPLETE
9	WACCI	UG/ACE-WACCI/GD/NCT/ 02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment- Lot 2	BANY LAB AND SUPPLIES	44,429.55	NCT	GOODS	COMPLETE
10	WACCI	UG/ACE-WACCI/GD/NCT/ 02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 3	HUGE LIMITED	72,459.00	NCT	GOODS	COMPLETE
11	WACCI	UG/ACE-WACCI/GD/NCT/ 02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment - Lot 4	SERVACO PPS LTD	94,620.55	NCT	GOODS	COMPLETE
12	WACCI	UG/ACE-WACCI/GD/NCT/ 02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 5	WAGTECH GHANA	233,713.07	NCT	GOODS	COMPLETE
13	WACCI	UG/ACE-WACCI/GD/NCT/ 02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 6	RESOLVE SYSTEM	324,921.90	NCT	GOODS	COMPLETE
		TOTAL			2,952,011.52			

0.5.1 Frequent usage of procurement methods

National Competitive Tendering (NCT) was the dominant method of procurement used by the

Centre (9no Lots – 69%), Price Quotation Method (4no.) representing 31%.

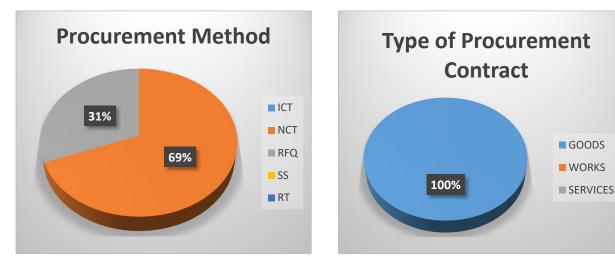


Figure 1 below illustrates the predominant usage of procurement methods by the Centre for the contracts audited.

Figure 1 Procurement methods Usage of Sample

0.5.2 Size of Procurement

Section 20 and schedule 1A of the Public Procurement Act 663 as amended categorizes entities into various groups based on low/small, medium and large/high spending activities. The UoG – WACCI per schedule 1A is categorized under 'Category C' as a Tertiary Institution.

Sixty-Nine (69%) of the total procurement contracts audited are classified under "Medium Value" procurement contracts, and thirty-one (31%) representing "Low/Small Value" Contracts. The table below (table 4) indicates the size of procurement contracts executed by the Center which were audited.

The Center can be classified as a "Medium Spending" Procurement Entity under the Categorization of Public Procurement Entities.

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Table 4 Size of Procurement

Size of Procurement	Pro	curemer	nt Type	Total	%	
Size of Procurement	Works	Goods	Services	TOLAT	70	
Low/Small	0	4	0	4	31%	
Medium	0	9	0	9	69%	
Large/High	0	0	0	0	0%	
Total	0	13	0	13	100%	

0.6 Summary of Sample Size Selection

Table 5 below indicates the distribution of 30% of the sample contracts selected for the procurement audit. The procurement plan for the period under review (August, 2018 – March, 2020) was not updated to include 1 procurement contract (i.e. Procurement Audit Service Contract of the Center). The update of the additional service contract resulted in a total sample size of 7 procurement contract packages out of a total of 24 procurement contract packages for the year under review.

					rocuren	nent M	etho	d	Туре	e of Pro	ocuren	nent
ID	No. of procurement Packages	30% sample	Sample Size	NCT	RFQ	ICT	SS	RT	GDS	WKS	CS	NCS
WACCI	23	6.9	7	11	13	0	0	0	23	0	0	0
WACCI-Rev	24	7.2	7	11	13	0	0	0	23	0	1 ^a	0
30% Sample					3.9	0	0	0	6.9	0	0.3	0
Selected Sample for Audit 7			3	4	0	0	0	7	0	0*	0	

Table 5 Summary of Sample Size Selection

*One consulting service contract– procurement audit of the Center was not selected ^aUpdate of procurement plan to add procurement audit contract to total sample

The seven (7) selected procurement packages have thirteen (13) specific procurement lots in all.

0.7 Audit Tools

The tools discussed below were designed for the audit purposes based on the best practice procurement processes in the PPA Act 663 as amended.

0.7.1 Procurement Performance and Risk Assessment Rating

A specifically designed form to determine the procurement performance and rating of the Centre was used. Timely performance of the Center, appropriate procurement method usage forms, contract approving authority forms, Red Flags Checklist for measuring Risks Levels were also used with the view to collecting information about possible symptoms and levels of Risks in the procurements carried out by the Centre. The tools are attached as **appendix 4** of this report.

0.7.2 Procurement Contracts Transparency Form

A specifically designed form to determine the transparency of the Center with respect to all the procurement contracts audited was used with the view to determining the level of compliance of the Center to transparency criteria within the procurement cycle. Twelve (12) variables (criteria) per the Procurement Act (Act 663 as amended) were used to collect data on the level of compliance of the Center to transparency in their procurements. This was evaluated and recoded through the Transparency Score Sheet. The tools are attached as **appendix 4** of this report

0.7.3 Procurement Responsibility Matrix Form

A specifically designed form to determine the responsibility matrix of the Center was used with the view to determining the people involved in the procurement of goods/works/services contracts within the procurement cycle. The specific roles and responsibilities of each person involved in the procurement process was evaluated and recoded through the RACI Responsibility Matrix. The tools are attached as **appendix 4** of this report

0.7.4 Frequency of bidders in winning contracts/payment of contracts/payment schedules form

A specifically designed form to determine the frequency of bidders winning the sample contracts was done. This was to assess the risk exposure levels of the Center with respect to bidders and familiarity. The lead time utilised by the Center in processing and paying bidders when invoices are submitted was also evaluated with a designed form. The total payments made to bidders was also assessed with a form. The tools are attached as **appendix 4** of this report

0.8 Key Findings

Generally, the following were key observations of the audit;

- 1. The overall Performance Assessment and Score of the Center and Implementing Agency was assessed as 'GOOD" with a mark of 95.83% on the procurement contracts audited in terms of procurement planning, tendering and solicitation, contract administration and quality;
- 2. Nine (9) out of the thirteen (13) procurement contracts audited, used National Competitive Tendering (NCT) procurement method for the solicitation of bids. The procedures and processes engaged were found consistent with section 44 of Act 663 as amended;
- 3. Four (4) procurement contracts used Price Quotation for solicitation of bids. They were found consistent with the procedures and processes outline in section 43 of Act 663 as amended;
- Six (6) contracts had substantial variance between the cost estimates and the bid amounts received (UG/ACE-WACCI/GD/NCT/02014/2017-Lot 1- 6- Supply and installation of Tissue Culture Laboratory Equipment);
- Three (3) contracts had large variance between the cost estimates and the bid amounts received (UG/W/AACE-WACCI/NCT/02006/2017-High Performance Server, UG/G/ACE-WACCI/RFQ/02009/2017-Lecture /conference room furniture, GR/UOG/ACE-WACCI/02006/2017-Computers);
- 6. Four (4) contracts were found to have narrow variance between the cost estimates and the bid amounts received;
- 7. All procurement contracts were published at the website of the Centre;
- The overall score on quality of contracts delivered/ongoing was assessed as "GOOD" at a mark of 94.83%;
- The overall score and assessment of procurement risks and red flags was rated as 34.27%. This represented 'low risk' based on the risk scale provided. Pre-Bid Phase and Contract Administration and Close Out recorded the best score in risk performance (33.33% and 33.87% respectively) with Evaluation and Award Phase recording the high risk performance (35.61%);

- 10. The overall transparency score of the Center was assessed as 55% for the procurement contracts that were reviewed and audited for the period. This signifies "Substantial Compliance" to the transparency criteria;
- 11. There has not been any incident of conflict of interest recorded or seen during the procurement audit;
- 12. A total net average duration of 189 days (6.3 months) was lost in overall procurement contract formation and signing activities;
- 13. A total net average duration of 271 days (9.03 months) was lost in the expected delivery of contracts;
- 14. Timely satisfactory performance of contracts during the tendering stage could not be assessed due to lack of "planned" information on tender invitation dates, tender closing dates, evaluation and submission of tenders, etc on the procurement plan of the Centre;
- 15. Contract files contained required documentation. The filing was moderately well done and chronological. Procurement contract documentations/ records and filing were adequate;
- 16. Based on visits to stores to assess and undertake physical inspections of the goods supplied vis-à-vis the available reports, the consultants are of the considered opinion that the goods supplied met the required quality levels (by relative quantitative assessment of quality by the audit team, quality of works scored 94.83%);
- One (1) procurement contract was not referred to the appropriate tender review committee for concurrent approval or otherwise as a result of contract modifications during implementation (GR/UOG/ACE-WACCI/02006/2017-Supply and installation of Computers Lot 1 -19 pcs);
- For ten (10) procurement Contracts (UG/W/AACE-WACCI/NCT/02006/2017, GR/UOG/ACE-WACCI/02006/2017[lot1-Lot2], UG/G/ACE-WACCI/RFQ/02009/2017, UG/ACE-WACCI/GD/NCT/02014/2017[Lot1-6]), the Centre exceeded their budgetary allocation for the procurements by GHS 931,632.60 (approximately 99%);
- 19. The Centre has the requisite capacity to handle procurement contracts adequately and efficiently;
- 20. The Public Procurement Act, 2003 (Act 663) as amended was used in the procurement activities of the Centre;
- 21. Procedures and processes used during procurement activities were found adequate and acceptable and in line with Act 663 as amended for 13no. procurement contracts;
- 22. Four (4) contracts were found to have narrow variance between the cost estimates and the bid amounts received;
- 23. Inadequate modification of contract and tender data in standard bidding documents (SBDs) in some projects;
- 24. Inadequate procurement contract close out for all contracts;
- 25. Non-availability of any one member of Entity Tender Committee (ETC) on the tender opening panels used by the Centre;

- 1. Continuous Professional Training and Development of Staff of Procurement Unit;
- 2. Continuous Improvement of procurement contract records/documentations and filing;
- Initiation of steps to properly close out procurement contracts (issuance of Final Acceptance Certificates, discharge of Performance Security after warranty period, writing of project completion reports etc);
- 4. Publication of General Procurement Notice (GPN) by the Centre;
- 5. Seeking of Ratification for procurement contracts that had modifications during implementation in accordance with section 87 of Act 663 as amended;
- 6. Publication of contracts awarded by the Centre with the PPA for all contracts within the audit period;
- 7. Implementation of section 64(2) when winning bids record substantially high margins between client's budget and least evaluated bidder;
- 8. Specific capacity building and training of procurement officers on Estimation and Budgeting for the Center.

0.10 Possible Indication of Noncompliance Requiring Action

For the period under review, all the procurement contracts reviewed and audited did not reveal any possible indication of non-compliance or misprocurement by the Center requiring any action from the Public Procurement Authority (PPA) or the World Bank.

0.11 Status of Mitigation Actions

The review includes an update on the progress of implementation of the risk mitigation and corrective actions from the previous procurement review and audit reports for the Center. The following corrective actions were implemented by the Center for the period under review:

- 1. Usage of appropriate procurement methods for all procurement contracts selected for review based on estimates and thresholds of the act 663 as amended;
- 2. Referral of all procurement contracts to the appropriate procurement approving authority based on thresholds and method of procurement;
- 3. Improvement in the overall score for procurement performance assessment and rating (92.73% per previous audit to 95.83% in current audit); and
- 4. Regular update of Procurement Plan.

The following corrective actions could not be implemented by the Center following the last review and examination of procurement contracts;

- 1. Publication of notice of procurement awards;
- 2. Specific training on estimation and budgeting for procurement officers; and
- 3. Closing out of procurement contracts with project completion reports.

1 PROCUREMENT AUDIT OF THE AFRICAN CENTRE OF EXCELLENCE (ACE) CENTRE

1.1 Introduction

The Africa Centre of Excellence (ACE) Project was instituted in 2013 by the Governments of Nigeria, Ghana, Benin Republic, Togo, Burkina Faso, Cameroun and Senegal with support from the World Bank, to promote regional specialization amongst participating universities in the West and Central Africa sub-region within disciplines that address particular common regional challenges.

It also aims at strengthening the capacities of these universities to enable them deliver high quality training and applied research.

The West African Centre for Crop Improvement (WACCI) is one of the African Centre of Excellence Centre at the University of Ghana – Legon.

As part of the performance monitoring process of the funds made available to the Centre, the procurement procedures and processes under the project shall be audited in accordance with adequate procurement audit standards.

The ACE-WACCI therefore engages the services of Procurement Audit Consultant to carry out the procurement audit of the ACEs (WACCI) for the period August, 2018 to March, 2020.

1.2 Background of Project

The West African Centre for Crop Improvement (WACCI) at the University of Ghana was established to contribute towards the apparent shortage of plant breeders in West and Central Africa. The World Bank African Centre of Excellence funding for the Centre provides the springboard for transforming WACCI into sustainable African Centre of Excellence for training plant breeders, Seed Scientists and Technologists.

The objectives of the project are;

- 1. Admit and train 65 PhD students in plant breeding and 60 MPhil students in Seed Science and Technology between 2014 and 2018
- 2. Expand, modernize and strengthen the WACCI breeding programme
- 3. Review and introduce new curricula and equip the Biotechnology Centre for cuttingedge research and training
- 4. Host world-class visiting faculty including Africans in the diaspora
- 5. Grant short term external fellowships in advanced laboratories to WACCI PhD students
- 6. Arrange three months internships for seed science and technology students for handson training with seed companies
- 7. Strengthen research collaboration with advanced institutions
- 8. Open up for mentoring of WACCI PhD and MPhil Students by scientist in advanced laboratories

1.3 Aim and Objectives of Assignment

The overall objectives of the consultancy services required as stated in the TOR and scope of works given by the Client include but not limited to the following:

- 1. To review the procurement, contracting, and implementation processes which have been followed for a sample of up to 30% of the total contracts, to confirm their consistency with the Credit Agreements.
- 2. To seek conclusions on:
 - a. the procurement and contracting procedures and processes followed for the contracts;
 - b. compliance with the World Banks general guiding principles of economy and efficiency, equal opportunity, transparency and quality including but not limited to, and to the extent possible, technical, physical completion, and price competitiveness aspects of contracts; and
 - c. possible improvements in the system.
- 3. To review the internal capacity to handle procurement efficiently, comment on the quality of procurement and contracting; and identify reasons for delays, if any.

1.4 Methodology of Assignment

Procurement audit standards require the clear definition of methodology employed to arrive at various conclusions and recommendations on procurement contracts audits.

1.4.1 Entry Conference

After signing of contract with the University of Ghana, an entry conference was held with the procurement unit of the client. A designated coordinator for the assignment in the person of Mr. Razak Mohammed (Principal Procurement Assistant) was introduced. Documentations on the WACCI Centre were made available for the commencement of the assignment.

1.4.2 Review of General Documentations

The following general documentations were provided by the WACCI Centre for review by the procurement audit consultant:

- 1. Financing Agreement
- 2. Performance and Funding contract
- 3. Revised Implementation Plan (2014 2018)
- 4. Environmental Management Plan for WACCI building
- 5. Approved Procurement Plans for the procurement year

1.4.3 Review of Specific Procurement Contracts Documentations

Documentations on specific procurement contracts were provided to the procurement audit consultants. As contained in the annual procurement plans of the Centre, procurement contracts were grouped and categorized into lots and types for ease of reference as per standard procurement planning.

Procurement contracts files and documentations were studied and reviewed thoroughly to ascertain their conformance with the general procurement plans.

Documents required for each procurement contract file were inspected and missing/inadequate documents requested from the coordinator of the assignment.

All necessary documentation required for each procurement contract file were requested for and made available to the consultant.

Specific procurement files were maintained for each procurement contract.

1.4.4 Sites/Stores/Project Fields Visitations

Direct confirmation of goods supplied was done by the procurement audit consultant at the stores section of the WACCI Centre.

Physical inspections were carried out on some of the goods supplied and examined to confirm specific goods procurement contracts contained on files.

Photographs of physical inspections and examinations of goods supplied and received at stores were taken. These pictures form part of this procurement audit report under appendix 6 Pictures of Procurement Contracts examined.

1.4.5 Clarifications and Further Documentations

To aid in the arrival of conclusions and opinions on the procurement process and procedures used in the disbursement of proceeds from the funds of the ACE project, clarifications and further documentations and evidence were requested from the Centre and designated procurement officers and staff during the procurement audit process.

1.4.6 Interaction with Staffs of Centre & Procurement Unit of UoG

As part of the process to verify and ascertain end-user involvement and participation in the procurement process, interactions with the staff of the Centre and the designated procurement officers of the Centre were undertaken.

Opinion of staff directly involved in procurement activities of the Centre were sought and incorporated in this report. The perceptions of these personnel on procurement activities and contracts of the ACE project and its impact on its beneficiaries were noted. Clarifications and answers were used to solicit opinions on the procurement decisions of the Centre.

1.4.7 Exit Conference

As a mandatory requirement for procurement audit assignments, an Exit Conference was held with the Centre and the Procurement Unit of UoG. Key issues observed and noted during the procurement audit process were made known. Explanations and clarifications were solicited and answers provided to issues of concern. Preliminary findings and opinion of the audit team were discussed with all and responsible officers provided adequate explanations and documents to support their justifications.

The cooperation of stakeholders involved during the procurement audit process was commendable.

1.5 Sampling of Procurement Contracts

As stated in the Terms of Reference, the consultant is expected to review a sample of up to thirty percent (30%) of the total contracts under the African Centre of Excellence World Bank Project at the Centre.

Based on the procurement plans submitted for the period under review, the criterion applied in choosing a sampling design was to design the sample so that it would yield the desired information with the reliability required at a minimum cost to the employer.

Statistical Sampling was considered more appropriate than Judgmental Sampling in determining the 30% proposed by the client. Simple Random Sampling of procurement contracts based on a Simple Stratified (Cluster) Sampling Technique was used to arrive at 30% sample of the procurement contracts.

The following criteria was therefore used to determine the design sample for procurement contracts selected for the procurement audit.

- 1. Type of Procurement Contract: Procurement contracts were categorized into works, goods, services and non-consulting services (technical services). This is in consonance with the approved procurement plan of the Centre.
- 2. Procurement method Used: the method of procurement used to procure goods, works, services and non-consulting services was considered in the selection of procurement contracts for the procurement audit
- 3. Unique coding of all procurement contracts on the approved procurement plan. All procurement contracts under the period of review were given unique coded numbers so as to ensure Simple Random Sampling of contracts for audit.
- 4. Selection of sample based on Simple Stratified (Cluster) Sampling Technique

1.6 Selected Samples for Audit

Table 5 below indicates the distribution of 30% of the sample contracts selected for the procurement audit. The procurement plans for the period under review (August, 2018 – March, 2020) were updated at regular intervals. However, the procurement plan for the period under review (August, 2018 – March, 2020) was not updated to include one (1) procurement contract (i.e. Procurement Audit contract of the Center). The update of the additional contract resulted in a total sample size of 7 procurement contract packages out of a total of 24 procurement contract packages for the year under review.

Table 6 Distribution of Samples for Audit

	Ρ	rocurem	nent M	etho	d	Тур	e of Pro	ocuren	nent			
ID	No. of procurement Packages	30% sample	Sample Size	NCT	RFQ	ICT	SS	RT	GDS	WKS	CS	NCS
WACCI	23	6.9	7	11	13	0	0	0	23	0	0	0
WACCI-Rev	24	7.2	7	11	13	0	0	0	23	0	1 ^a	0
30% Sample					3.9	0	0	0	6.9	0	0.3	0
Selected Sample for Audit 7			3	4	0	0	0	7	0	0*	0	

*One consulting service contract- procurement audit of the Center was not selected

^a Update of procurement plan to add procurement audit contract to total sample

Table 7 Scope of Procurement Contracts Audited

					CONTRACT	PROCUREMENT	PROCUREMENT	
ID	ENTITY	CONTRACT NO	PROCUREMENT CONTRACT	SUCCESSFUL BIDDER	AMOUNT(GHS)	METHOD USED	TYPE	STATUS
1	WACCI	UG/AURG/WACCI/GD/ NCT/002B/2018	Supply and Installation of Generator Sets	G&J TECHNICAL SERVICES	744,519.00	NCT	GOODS	COMPLETE
2	WACCI	UG/AURG/WACCI/GD /NCT/003/2018	Supply and Installation of 8 Person Elevator	MS CONSULT LTD	223,890.00	NCT	GOODS	COMPLETE
3	WACCI	UG/W/AACE-WACCI/ NCT/02006/2017	Supply and Installation of Bioinformatics Equipment - High Performance Server	BLINK STAR TECHNOLOGY LTD	496,749.69	NCT	GOODS	COMPLETE
4	WACCI	UG/G/ACE-WACCI/ NCT/02006A/2017	Supply and Installation of Epson LCD Multimedia Projectors (6pcs)	GOODWIL SUPPLIES	21,714.00	RFQ	GOODS	COMPLETE
5	WACCI	GR/UOG/ACE-WACCI/ 02006/2017	Supply and Installation of Computers - Lot 1 (19 Pcs)	IT MARKET LTD	96,900.00	RFQ	GOODS	COMPLETE
6	WACCI	GR/UOG/ACE-WACCI/ 02006/2017	Supply and Installation of Computers - Lot 2 (5 Pcs)	IT MARKET LTD	44,500.00	RFQ	GOODS	COMPLETE
7	WACCI	UG/G/ACE-WACCI/RFQ/ 02009/2017	Supply and Installation of Lecture, Conference and Meeting Room Furniture	GRACE FILLED VENTURES	99,000.00	RFQ	GOODS	COMPLETE
8	WACCI	UG/ACE-WACCI/GD/NCT/ 02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 1	ARCOA GHANA LTD	454,594.76	NCT	GOODS	COMPLETE
9	WACCI	UG/ACE-WACCI/GD/NCT/ 02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment- Lot 2	BANY LAB AND SUPPLIES	44,429.55	NCT	GOODS	COMPLETE
10	WACCI	UG/ACE-WACCI/GD/NCT/ 02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 3	HUGE LIMITED	72,459.00	NCT	GOODS	COMPLETE
11	WACCI	UG/ACE-WACCI/GD/NCT/ 02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment - Lot 4	SERVACO PPS LTD	94,620.55	NCT	GOODS	COMPLETE
12	WACCI	UG/ACE-WACCI/GD/NCT/ 02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 5	WAGTECH GHANA	233,713.07	NCT	GOODS	COMPLETE
13	WACCI	UG/ACE-WACCI/GD/NCT/ 02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 6	RESOLVE SYSTEM	324,921.90	NCT	GOODS	COMPLETE
		TOTAL			2,952,011.52			

1.7 Usage of Country Procurement Systems (CPS)

'The Use of Country Systems (UCS) refers to the usage of the procurement procedures, processes and methods contemplated in the public procurement system in place in the country of a Borrower that have been determined to be consistent with the Guidelines of the Bank and acceptable to the Bank'.

Justification for the usage of the Public Procurement Law of Ghana 2003, Act 663 as amended, the public procurement manual and guidelines of Ghana in the implementation arrangements for the project is explicitly stated in section 2.2 of the Performance and Funding Contract – Africa Centre of Excellence for Crop Improvement (WACCI), University of Ghana. Section 2.2 of the performance and funding contract must be read together with section 1.5, 2.6, 2.10, and 4.4 to adequately justify the usage of the Public Procurement Law, 2003 (Act 663 as amended) and manual.

The procurement audit consultants were convinced on the justification for the usage of Country Procurement systems (CPS) for the procurement of goods, works, consulting services, and non-consulting services under the African Centre of Excellence (ACE) World Bank Project for the year under review (1^{st} August, 2018 – 31^{st} March, 2020).

1.8 Conflict of Interest

The World Bank's procurement guidelines and policies require that a firm participating in a procurement process under Bank-financed projects shall not have a conflict of interest. Any firm or individual professional found to have a conflict of interest shall be ineligible for award of a procurement contract.

To determine and test for conflict of interest situations, the registration and legal status of bidders were reviewed and checked to ensure compliance with potential situation of conflict of interest. Conflict of interest declaration forms by evaluation panel members and bidders were requested for from the Centre – WACCI and the Procurement Unit of University of Ghana. There was no documentary evidence of the availability of conflict of interest declaration forms. The following criteria were used to ascertain conflict of interest situations in this procurement audit assignment:

- 1. A firm that is providing goods, works, non-consulting services resulting from or directly related to consulting services for the preparation or implementation of a project that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm
- 2. Such firm submits more than one bid, either individually or as a joint venture partner in another bid, except for permitted alternative bids
- 3. Such firm (including its personnel) has a close business or family relationship with a professional staff of the Borrower (or of the project implementing agency, or of a recipient of a part of the loan)
- 4. Such a firm does not comply with any other conflict of interest situation as specified in the Bank's Standard Bidding Documents relevant to the specific procurement process.

2 PROCUREMENT AUDIT OF THE WACCI

2.1 Background

The ACE Centre of WACCI is located on the main campus of the University of Ghana – Legon. Procurement contracts of the Centre are managed by the Procurement Unit and Physical Development and Municipal Services Directorate (PDMSD) of the University of Ghana.

For the period under review, a total of twenty-four (24) procurement contract packages were planned and executed by the Centre.

Of the total number, twenty-three (23) were goods procurement contracts (96%), and one (1) consulting services contract (4%). See table 7 below

	Total No. of Pro	Audited Procurement Packages				
ID				No. of	%	% of Total
		Total No. of	Percentage	Contract		Contract
	Procurement Contract	Contract	reitenlage	Packages		Packages
	Туре	Packages		Audited		Selected
1	Goods	23	96%	7	100.0%	30.43%
2	Works	0	0%	0	0.00%	0%
3	Consulting Services	1	4%	0	0.00%	0%
4	Total	24	100%	7	100%	30.43*%

Table 8 Total Procurement Packages of WACCI

*exclusion of procurement audit contract of Center within sample size

A total of seven (7) procurement contracts package representing 30.12% of the total procurement contracts packages executed within the period of the audit were reviewed and examined. The selected seven (7) reviewed contract packages comprised thirteen (13) specific procurement contract lots which were representative of all the types of procurement contracts executed by the Center (100% of all Goods contracts).

For the selected reviewed contracts, National Competitive Tendering (NCT) procurement method constituted 69% (i.e. 9no.) of the procurement contracts, and 31% (i.e. 4no.) for Price Quotation (shopping) method of procurement. See figure 2 below

For the 13 selected reviewed contracts, Procurement of goods contract constituted 100% (13no.) see figure 2 and 3 below.

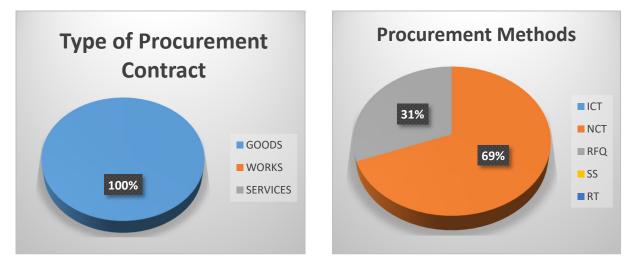


Figure 2 Type of Procurement Contracts & Procurement methods

2.2 Key Issues Identified

Key issues identified during the procurement audit were categorized into:

- 1. Performance (performance was evaluated in 5 areas); and
- 2. Procurement risks and red flags (Procurement risks evaluated in 3 areas)
- 3. Procurement transparency (transparency evaluated on 12 criteria)

2.2.1 Planning

Under this aspect, assessment was done on the appropriateness of procurement planning, designs, and specifications to meet the intended project objectives. Issues such as adequacy of specifications, completeness and comprehensiveness of tender documents, and specifications were assessed.

The overall score for planning was assessed to be good at 94.30% (see Table 14).

The observed weaknesses on planning included;

- 1. Non adoption of Standard Procurement Plan Templates leading to Inadequate information on procurement plan (Tender invitation dates, Tender closing/submission dates, Evaluation of tenders and submission of tender evaluation reports date, Contract Approving authorities, Approval of evaluation report by final authority dates etc.)
- 2. Non-availability of any one member of Entity Tender Committee (ETC) on the tender opening panels used by the Centre
- Inadequate budgetary preparation and allocation resulting in high substantial margin between the Client's budget and the lowest evaluated bid (UG/ACE-WACCI/GD/NCT/02014/2017 - Supply and installation of Tissue Culture Laboratory Equipment Lot 1 - 6)
- For ten (10) procurement contracts, the average lowest evaluated bidders price exceeded the Center's budget by plus 133.74% (UG/W/AACE-WACCI/NCT/02006/2017, GR/UOG/ACE-WACCI/02006/2017[lot1-Lot2], UG/G/ACE-WACCI/RFQ/02009/2017, UG/ACE-WACCI/GD/NCT/02014/2017[Lot1-6]).
- 5. A total net duration of 2401 days (82 months) was lost in overall procurement contract formation and signing activities.

6. A total net duration of 3521 days (117.37 months) was lost in the expected delivery of contracts

2.2.2 Tendering & Solicitation

Under this aspect, a critical review was made on the tender process with a view to determining whether the tender process complied with Public Procurement Act and its Regulations. In addition, the assessment aimed at determining whether procurement contract documents contained all necessary information and whether the contract was properly signed.

The overall score for tendering and solicitation was assessed to be good at 94.65% (see table 14)

The observed weaknesses on tendering and solicitation included;

- 1. Inadequate customization of the bidding documents and contract documents
- 2. Lack of publication of procurement contracts award
- 3. No filling and signing of conflict of interest declaration forms by evaluation panel members
- 4. Lack of notification of contract award to unsuccessful bidders
- High substantial margin between the Client's budget and the lowest evaluated bids (UG/ACE-WACCI/GD/NCT/02014/2017 - Supply and installation of Tissue Culture Laboratory Equipment Lot 1 - 6)
- 6. Six (6) contracts had large variance between the cost estimates and the bid amounts received (UG/ACE-WACCI/02004/2016-supply and installation of Tissue Culture Laboratory Equipment- Lot 1-6)
- 7. For ten (10) procurement Contracts, the Centre exceeded their approved budgetary allocation for the procurements by US\$ 213,071.22 (UG/W/AACE-WACCI/NCT/02006/2017, UG/G/ACE-WACCI/NCT/02006A/2017,GR/UOG/ACE-WACCI/02006/2017,GR/UOG/ACE-WACCI/02006/2017, UG/G/ACE-WACCI/RFQ/02009/2017,UG/ACE-WACCI/GD/NCT/02014/2017,UG/ACE)

2.2.3 Contract Administration

Under this aspect, a critical review was made on whether the procurement contracts were properly administered by assessing time, scope, quality, risk, communication and cost management issues such as extension of time, delays, variation orders, claims analysis, price fluctuations, payment procedures, dispute resolutions, contract terminations, etc. was determined.

The overall score on contract administration was assessed to be good at 99.55% of all the audited procurement contracts (see Table 14).

As far as contracts administration is concerned, the auditors revealed the following weaknesses:

- 1. one (1) contract was not referred to the appropriate Tender Committee or Tender Review Committee for concurrent approval or otherwise as a result of contract modifications
- 2. Inadequate Procurement Contract Close out Procedures on all projects including preparation of project completion reports with lessons learnt
- 3. Non issuance of Certificate of Final Acceptance of equipment by Centre

2.2.4 Quality

Under this aspect, issues related to compliance with Specifications, Designs, and quality assurance plan were critically reviewed.

The audit team visited the stores for the goods supply contracts to undertake physical assessment of the deliverables. The team also inspected available test certificates/reports and other quality assurance and control tools. The team is of the considered opinion that the quality of goods delivered met the specifications stated in the contract documents and met the desired levels of quality.

Quantitatively, the audit team scored quality as 'good' at 94.83% (see table 14).

The observed weaknesses on Quality included;

- 1. Non issuance of Certificate of Final Acceptance
- 2. Non-inclusion of products test results in project files

2.2.5 Procurement Risks and Red Flags

In order to collect information about possible risks levels and exposure in the procurements carried out by Centre, the Procurement Audit Team specifically developed Procurement Risks Indicators and Red Flags Checklist were used.

It is important to note that a detected red flag is not in itself evidence of a procurement risk. However, the higher the number of red flags detected, the higher the likelihood that the risk exposure level is high. To that end, Red Flag Checklist for each project was completed, and findings summarized.

It is the Procurement Audit Team opinion that all procurement contracts which scored 40% and above on Red Flags scale, indicates likelihood of Medium to High Risk Exposure level in its procurements or the procurement of the respective contracts.

The overall score on Procurement Risks and Red Flags was assessed to be 'Low Risk' at 34.27% as indicated in table 4. This can be attributed largely to the fact that the audit team is able to falsify the red flags based on the available documentation.

Please see section 2.8.2 for detailed risk assessment of procurement contracts and rating.

2.3 Internal Capacity to handle Procurements

2.3.1 Organizational structure

In order to determine the capacity of the Centre to handle procurements, the procurement Audit Team assessed the units responsible for procurement activities of the University of Ghana. Two (2) departments are responsible for the management of procurement activities of the Centre. The Procurement Unit (PU) and the Physical Development and Municipal Services Directorate (PDMSD) oversee the management of procurements for the Centre.

2.3.2 Procurement Officer

1. There was a focal person responsible for procurement activities of the Centre

- The head of Procurement Unit of the University of Ghana, oversees the schedule of this officer
- 3. The procurement officer responsible for the Centre has the requisite educational and professional qualifications to handle adequately the procurement activities and function of the Centre (please see appendix 8).
- 4. The officer is a professional member of the Chartered Institute of Procurement and Supply (MCIPS) which is a recognized and accredited Professional body (please see appendix 8).
- 5. The officer has requisite knowledge of the Ghanaian Procurement Legal Framework and Legislations

2.3.3 Procurement Unit

The Procurement Unit is largely responsible for the coordination of all activities involved in the procurement of works, goods, services and non-consulting services for the Centre.

The Procurement Unit is responsible for the planning, development, implementation, administration, integration and monitoring of contracting and procurement activities at the Centre. The unit has five (5) procurement professionals headed by a senior member of the University. The professional associations and qualifications of the staff of the Unit is attached as appendix 6.

The head of procurement unit is the secretary of the Entity Tender Committee (ETC) of the University as required by Act 663 as amended.

2.3.4 Physical Development and Municipal Services Directorate (PDMSD)

The Physical Development and Municipal Services Directorate (PDMSD) is in charge of works procurement contracts, technical support in construction and supervision of construction works.

The directorate is headed by a Director with 25 years of experience in the procurement of Works (see appendix 8). The directorate has seven (7) professionals with diverse backgrounds in the procurement and supervision of construction projects.

2.3.5 Entity Tender Committee

An Entity Tender Committee per Section 20 and Schedule 1A and 1B of Act 663 as amended was in place at the time of the procurement audit.

The educational and professional qualifications of officers involved in the procurement activities of the Centre is attached as appendix 6.

2.4 Contract Packages and Procurement Methods

The value of a procurement contract package will determine the appropriate method of procurement to be used for procuring the contract (section 20C of Act 663 as amended).

The procurement plan of the Centre was prepared and estimates for contract packages were denominated in United States Dollars. Based on the Foreign Exchange Rate at the time of preparing the procurement plan (10th February, 2017) for approval, the following contract packages were procured using the appropriate procurement method. No procurement contract was procured without the usage of the appropriate method.

Table 9: Contract Packages & Procurement Methods

					ESTIMATED	PROCUREMENT METHOD USED/IN	APPROPRIATE	
ID	CONTRACT NO	PROJECT NAME	PROCUREMENT TYPE	ESTIMATED COST (US\$)	COST (GHS)*	PROCUREMENT PLAN	PROCUREMENT METHOD ¹	REMARKS
	UG/AURG/WACCI/GD/NCT/002B/				<u> </u>			
1	2018	Supply and Installation of Generator Sets	GOODS	187,000.00	817,638.80	NCT	NCT	
	UG/AURG/WACCI/GD/NCT/003/2							
2	018	Supply and Installation of 8 Person Elevator	GOODS	50,000.00	218,620.00	NCT	NCT	
_	UG/W/AACE-	Supply and Installation of Bioinformatics						
3	WACCI/NCT/02006/2017	Equipment -High Performance Server	GOODS	79,000.00	345,419.60	NCT	NCT	
	UG/G/ACE-	Supply and Installation of Epson LCD	00000	F 000 00	21.052.00	550	550	
4	WACCI/NCT/02006A/2017	Multimedia Projectors (6pcs)	GOODS	5,000.00	21,862.00	RFQ	RFQ	
5	GR/UOG/ACE-WACCI/02006/2017	Supply and Installation of Computers - Lot 1 (19 Pcs)	GOODS	22,080.00	96,542.59	RFO	RFQ	
		Supply and Installation of Computers - Lot 2	00000	22/000100	50/512155	14 2	14 Q	
6	GR/UOG/ACE-WACCI/02006/2017	(5 Pcs)	GOODS	9,920.00	43,374.21	RFQ	RFQ	
	UG/G/ACE-	Supply and Installation of Lecture, Conference						
7	WACCI/RFQ/02009/2017	and Meeting Room Furniture	GOODS	20,000.00	87,448.00	RFQ	RFQ	
	UG/ACE-	Supply and Installation of Tissue Culture						
8	WACCI/GD/NCT/02014/2017	Laboratory Equipment-Lot 1	GOODS	31,117.62	136,058.66	NCT	NCT	
	UG/ACE-	Supply and Installation of Tissue Culture						
9	WACCI/GD/NCT/02014/2017	Laboratory Equipment- Lot 2	GOODS	3,041.26	13,297.61	NCT	RFQ*	
10	UG/ACE-	Supply and Installation of Tissue Culture		4.050.04	04 606 70	NOT	D.F.O.K	
10	WACCI/GD/NCT/02014/2017	Laboratory Equipment-Lot 3	GOODS	4,959.91	21,686.73	NCT	RFQ*	
1.1	UG/ACE-	Supply and Installation of Tissue Culture	COODC	C 47C 00	20 210 61	NCT		
11	WACCI/GD/NCT/02014/2017	Laboratory Equipment - Lot 4	GOODS	6,476.90	28,319.61	NCT	RFQ*	
12	UG/ACE-	Supply and Installation of Tissue Culture	GOODS	15 007 07	60.040.52	NCT	RFQ*	
12	WACCI/GD/NCT/02014/2017 UG/ACE-	Laboratory Equipment-Lot 5 Supply and Installation of Tissue Culture	60005	15,997.97	69,949.52	INCI	ĸŗų	
13	WACCI/GD/NCT/02014/2017	Laboratory Equipment-Lot 6	GOODS	22,241.34	97,248.02	NCT	RFQ*	
		TOTAL		456,835.00	1,997,465.35			

* Exchange rate of 4.3724 as at 10th February 2017 (https://bog.gov.gh/markets/daily-interbank-fx-rates)

¹Based on Act 663 as amended Thresholds

RFQ* appropriate method when contract package is split into lots in procurement plan. RFQ based on approximate % distribution of contract sums

2.5 Appropriate Contract Approving Authority

In accordance with section 20 of Act 663 as amended, Procurement Entities are required to refer to the appropriate contract approving authority any procurement above its threshold or usage of specific procurement methods for approval or otherwise. During the period of the review and examination of the procurement contracts, all the reviewed procurement contracts were referred to the appropriate contract approving authority for approval or otherwise. See table 9 below

2.6 Review and Concurrent Approvals

In accordance with section 87 of Act 663 as amended, Entity Tender Committees are required to refer to the appropriate tender review committee any procurement above its threshold for concurrent approval or otherwise due to contract modifications exceeding 10%. During the period under review and examination of the procurement contracts, one (1) contracts was not referred to the appropriate tender or tender review committee for concurrent approval or otherwise as a result of contract modifications. See table 10 below

Table 10 Contract Approving Authority

				PROCUREMENT	PROCUREMENT	CONTRACT SUM @ AWARD	CONTRACT APPROVING AUTHORITY	APPROPRIATE CONTRACT APPROVING	
ID	ENTITY	CONTRACT NO	PROJECT NAME	TYPE	METHOD USED	(GHS)*	USED	AUTHORITY ¹	REMARKS
1	WACCI	UG/AURG/WACCI/GD/NCT /002B/2018	Supply and Installation of Generator Sets	GOODS	NCT	744,519.00	ETC	ETC	
2	WACCI	UG/AURG/WACCI/GD/NCT /003/2018	Supply and Installation of 8 Person Elevator	GOODS	NCT	223,890.00	ETC	ETC	
3	WACCI	UG/W/AACE- WACCI/NCT/02006/2017	Supply and Installation of Bioinformatics Equipment -High Performance Server	GOODS	NCT	496,749.69	ETC	ETC	
4	WACCI	UG/G/ACE- WACCI/NCT/02006A/2017	Supply and Installation of Epson LCD Multimedia Projectors (6pcs)	GOODS	RFQ	21,714.00	HoE	HoE	
5	WACCI	GR/UOG/ACE-WACCI/02006/2017	Supply and Installation of Computers - Lot 1 (19 Pcs)	GOODS	RFQ	96,900.00	HoE	HoE	
6	WACCI	GR/UOG/ACE-WACCI/02006/2017	Supply and Installation of Computers - Lot 2 (5 Pcs)	GOODS	RFQ	44,500.00	HoE	HoE	
7	WACCI	UG/G/ACE- WACCI/RFQ/02009/2017	Supply and Installation of Lecture, Conference and Meeting Room Furniture	GOODS	RFQ	99,000.00	HoE	HoE	
8	WACCI	UG/ACE- WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 1	GOODS	NCT	454,594.76	ETC	ETC	
9	WACCI	UG/ACE- WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment- Lot 2	GOODS	NCT	44,429.55	ETC	HoE	
10	WACCI	UG/ACE- WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 3	GOODS	NCT	72,459.00	ETC	HoE	
11	WACCI	UG/ACE- WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment - Lot 4	GOODS	NCT	94,620.55	ETC	HoE	
12	WACCI	UG/ACE- WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 5	GOODS	NCT	233,713.07	ETC	ETC	
13	WACCI	UG/ACE- WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 6	GOODS	NCT	324,921.90	ETC	ETC	

1-Approving Authority based on 5th Schedule of Act 663 as amended

Table 11: Review and Concurrent Approvals

ID	ENTITY	CONTRACT NO	PROJECT NAME	TOTAL CONTRACT SUM (GHS)	TOTAL PAYMENTS TO DATE (GHS)	DEFICIT/ SURPLUS PAYMENTS (GHS)	% COST OVERRUN
1	WACCI	UG/AURG/WACCI/GD/NCT/002B/2018	Supply and Installation of Generator Sets	744,519.00	779,991.00	(35,472.00)	+4.8%
2	WACCI	UG/AURG/WACCI/GD/NCT/003/2018	Supply and Installation of 8 Person Elevator	223,890.00	223,890.00	-	0.0%
3	WACCI	UG/W/AACE-WACCI/NCT/02006/2017	Supply and Installation of Bioinformatics Equipment -High Performance Server	496,749.69	521,670.54	(24,920.85)	+5.0%
4	WACCI	UG/G/ACE-WACCI/NCT/02006A/2017	Supply and Installation of Epson LCD Multimedia Projectors (6pcs)	21,714.00	21,714.00	-	0.0%
5	WACCI	GR/UOG/ACE-WACCI/02006/2017	Supply and Installation of Computers - Lot 1 (19 Pcs)	96,900.00	127,500.00	(30,600.00)	+31.6%
6	WACCI	GR/UOG/ACE-WACCI/02006/2017	Supply and Installation of Computers - Lot 2 (5 Pcs)	44,500.00	44,500.00	-	0.0%
7	WACCI	UG/G/ACE-WACCI/RFQ/02009/2017	Supply and Installation of Lecture, Conference and Meeting Room Furniture	99,000.00	99,000.00	-	0.0%
8	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 1	454,594.76	454,594.78	(0.02)	0.0%
9	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment- Lot 2	44,429.55	44,429.55	-	0.0%
10	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 3	72,459.00	72,459.00	-	0.0%
11	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment - Lot 4	94,620.55	50,945.45	43,675.10	-46.2%
12	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 5	233,713.07	233,713.07	-	0.0%
13	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 6	324,921.90	324,921.90	0.00	0.0%
		тс	DTAL	2,952,011.52	2,999,329.29	(47,317.77)	+1.6%

*-10% limit of modification without need to seek concurrent approval per section 87 of Act 663 as amended

2.7 Procurement Responsibilities Matrix

To outline the chain of responsibilities within the procurement arrangement, a Responsible– Accountable–Consulted–Informed (RACI) Chart was used. It is a responsibility matrix that outlines the roles of individuals against various tasks or deliverables within the procurement arrangement of the Centre.

This clearly spells out who does what, within which required period, who has the responsibility of clearing any document prepared by the procurement officer, who and which office provides technical input to the procurement document among others within the procurement arrangement of the Centre.

During the review and examination of the procurement contracts, the following chain of responsibility was observed:

- 1. Tendering process was initiated by the Centre Leader based on the approved procurement plan and the need for the procurement.
- 2. The procurement officer was responsible for the preparation of tender and contract documents with technical input from the technical unit of the Centre (IT, Works, Automobiles, Laboratory technicians, etc)
- 3. The tender and contract document is approved by the Head of Procurement Unit
- 4. The Entity Tender Committee of the University of Ghana approves the award of contract within their thresholds or seek concurrent approval from the Central Review Committee for procurements which exceed their threshold
- 5. The head of entity signs all procurement contracts
- 6. The minimum timelines allowed by the Public Procurement Act (Act 663 as amended) were adhered to all involved within the procurement process
- 7. The guidelines and regulations of the Public Procurement Acts (Act 663 and Act 914) were used
- 8. The procurement unit of the university of Ghana manages all procurement processes and procedures for the Centre
- 9. Roles and responsibilities were defined and clear.

Key to responsibility matrix chart:

Responsible (R)	Those responsible to do the work to achieve the outcome required
Accountable (A)	Those who authorise the work and who are ultimately accountable for the correct completion of the work
Consulted (C)	Those who are consulted about the work at various stages of its progress
Informed (I)	Those who are kept informed about the work

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Table 12: Procurement Responsibility Matrix

PROCUREMENT RESPONSIBILITY MATRIX

	Activity/Deliverable		Human Resource								
ID		Duration (days)	Procurement Officer	Technical Unit (IT, Works, Auto etc)	Centre Leader	Head of Proc. Unit	Head of Entity	ETC- UoG	CTRC	Stores Unit	Finance Officer
1	Initiation of Tendering/Solicitation	10	А	С	R	I					
2	Preparation of Tender Documents (amendment of STD's)	5	R	С	Ι	A					
3	Preparation of Technical Specifications	15	А	R	С	I					
4	Review & Approval of Tender Document(+Tech. Specs)	7	А	Ι	С	R					
5	Invitation to Tender	7–28	R	Ι	С	Α					
6	Receipt & Opening of Tenders	1	Α	Ι	С	R		I*			
7	Constitution of Evaluation Panel	10	С	Ι	R	А					
8	Evaluation of Tenders	10	R	С	Ι	Α					
9	Writing of Evaluation Report & Submission	5	R	С	I	A					
10	Approval of Report & Taking of necessary Action	10	I		I	С	A	R			
11	Concurrent Approval of Report (if applicable)	1	I		I	С	A		R		
12	Award of Procurement Contract	5	Ι	Ι	Ι	А	R	Ι			
13	Signing of Contract	5	С		Ι	А	R	Ι			I
14	Inspections/Approvals/Receipt of Goods/Works/Services	Min. 14	А	С	I	I	I			R	Ι
15	Payments	30 after	Ι		C	Ι	А				R
16	Observation/Monitoring during Warranty Period	6mnth-3yrs	R	А	Ι	С	I				
17	Final Acceptance of Product	6mnth-3yrs	I	R	C	Α	Ι			Ι	I

I*-Usage of Tender Opening panel

2.8 Examination of Procurement Risk

2.8.1 General Procurement Contract Risks

In order to collect information about possible risks levels and exposure in the procurements carried out by Centre, the Procurement Audit Team specifically developed Procurement Risks Indicators and Red Flags Checklist and used them to evaluate the risk performance.

The following risks were observed and rated as per section 2.8.2 below:

- 1. Inadequate modification of tender and contract data sections of standard bidding documents (SBD)
- Lack of concurrent approvals or otherwise for procurement contract(s) with modifications beyond 10% (please see Review and concurrent approvals for each procurement contract examined)
- High substantial margin between the Client's budget and the lowest evaluated bids
- 4. Failure to publish award decisions and simultaneously notify all bidders
- 5. Failure to write project completion reports with lessons learnt
- 6. Non- availability of detailed information on tendering & evaluation dates and final approving authority for each specific procurement contract in the Procurement plan of the Centre (tender invitation dates, tender closing dates, submission and approval of tender evaluation report dates)
- 7. Difficulty in the overall assessment of timely procurement progress (Actuals verses planned) as a result of inadequate information on the procurement plan.

2.8.2 General Procurement Risk Rating & Performance

The performance and rating of risks levels and exposure was evaluated in three (3) areas (Table 12);

It is the Procurement Audit Team's opinion that all procurement contracts which scored 40% and above on Risk Exposure level assessment and Red Flags scale, indicates likelihood of Medium to High Risk Exposure level in its procurements or the procurement of the respective contracts.

Evaluation scale of risk assessment and rating

Overall Project Risk Performance	34.27%		
	0= NA	0%	
Evaluation Scale	1=L	0% - 39%	
	2=M	40% - 59%	
	3=H	60% -100%	
NA=Not Applicable 1=Low Risk M=Medium and H=L	liah Risk	· · · · · · · · · · · · · · · · · · ·	

NA=NOT Applicable, L=LOW RISK, M=Medium and H=High RISK

1. Pre-bid phase

The overall score for pre-bid phase risk assessment and rating was found to be 'low risk' at 33.33%.

- Evaluation and award phase
 The overall score for Evaluation and Award Phase risks was assessed to be 'Low risk' at 35.61%.
- *3. Contract management and close out phase* The overall score on contract management and close out was assessed to be 'low risk' at 33.87% of all the audited procurement contracts.

The overall score on Procurement Risks and Red Flags was assessed to be "Low Risk" at the time of the audit at 34.27% (table 11). This can be attributed largely to the fact that the audit team is able to falsify the red flag based on the available documentation.

2.8.3 Frequency of Bidders in Winning Multiple Contracts

Efforts to fight bid rigging more effectively can be supported by collecting historical information on bidding behaviour, by constantly monitoring bidding activities, and by performing analyses on bid data received by the Center. The frequency of bidders wining contracts with the Center was analysed with respect to competitive tenders. It is important to state that, this does not confirm any pattern but seek to indicate the risk exposure level of the Center with respect to these tenders.

It can therefore be inferred from table 12 below that, bidders have the tendency of wining multiple lots in subsequent tenders. This may not entirely constitute a risk to the procurement entity in goods procurement contracts as long as the supplier demonstrates adequate financial capacity to handle the multiple lots concurrently.

In goods procurement contracts, the risk is minimal with respect to multiple lots awarded to one bidder. However, this tend to be more a cause of concern in works procurement contracts in which case, the procurement entity has to package tender documents in such a way that, a bidder will be required to make available different set of personnel and equipment in the event if one particular bidder emerging successful in multiple lots.

Table 13: General Procurement Risk Rating & Performance

ID				CONTRACT AMOUNT (GHS)	CATECODY	STATUS	PRE-BID PHASE	EVALUATION AND AWARD	CONTRACT MANAGEMENT AND	PROJECT
ID	ENTITY	CONTRACT NO	PROJECT NAME	(GHS)	CATEGORY	STATUS	PHASE	PHASE	CLOSE OUT PHASE	OVERALL
1	WACCI	UG/AURG/WACCI/GD/NCT/002B/2018	Supply and Installation of Generator Sets	744,519.00	GOODS	COMPLETE	33.33%	37.04%	35.09%	35.15%
2	WACCI	UG/AURG/WACCI/GD/NCT/003/2018	Supply and Installation of 8 Person Elevator	223,890.00	GOODS	COMPLETE	33.33%	33.33%	33.33%	33.33%
3	WACCI	UG/W/AACE-WACCI/NCT/02006/2017	Supply and Installation of Bioinformatics Equipment -High Performance Server	496,749.69	GOODS	COMPLETE	33.33%	37.04%	33.33%	34.57%
4	WACCI	UG/G/ACE-WACCI/NCT/02006A/2017	Supply and Installation of Epson LCD Multimedia Projectors (6pcs)	21,714.00	GOODS	COMPLETE	33.33%	33.33%	33.33%	33.33%
5	WACCI	GR/UOG/ACE-WACCI/02006/2017	Supply and Installation of Computers - Lot 1 (19 Pcs)	96,900.00	GOODS	COMPLETE	33.33%	37.04%	35.09%	35.15%
6	WACCI	GR/UOG/ACE-WACCI/02006/2017	Supply and Installation of Computers - Lot 2 (5 Pcs)	44,500.00	GOODS	COMPLETE	33.33%	35.19%	36.84%	35.12%
7	WACCI	UG/G/ACE-WACCI/RFQ/02009/2017	Supply and Installation of Lecture, Conference and Meeting Room Furniture	99,000.00	GOODS	COMPLETE	33.33%	35.19%	33.33%	33.95%
8	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 1	454,594.76	GOODS	COMPLETE	33.33%	35.19%	33.33%	33.95%
9	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment- Lot 2	44,429.55	GOODS	COMPLETE	33.33%	37.04%	33.33%	34.57%
10	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 3	72,459.00	GOODS	COMPLETE	33.33%	37.04%	33.33%	34.57%
11	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment - Lot 4	94,620.55	GOODS	COMPLETE	33.33%	35.19%	33.33%	33.95%
12	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 5	233,713.07	GOODS	COMPLETE	33.33%	35.19%	33.33%	33.95%
13	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 6	324,921.90	GOODS	COMPLETE	33.33%	35.19%	33.33%	33.95%
15				02.1021100	00000		22.33 /0	55.1970	22.3570	00.0070
		OVERALL RISK ASS	2,952,011.52			33.33%	35.61%	33.87%	34.27%	

Table 14 Frequency of Bidders in winning Multiple Contracts

				PROCUREMENT	PROCUREMENT	Contract Sum @ Award	SUCCESSFUL	FREQUENCY OF BIDDER WITHIN	
ID	ENTITY	CONTRACT NO	PROJECT NAME	TYPE	METHOD USED	(GHS)*	BIDDER	SAMPLE	REMARKS
1	WACCI	UG/AURG/WACCI/GD/NCT/002B/2018	Supply and Installation of Generator Sets	GOODS	NCT	744,519.00	G&J TECHNICAL SERVICES	1 Lot	
2	WACCI	UG/AURG/WACCI/GD/NCT/003/2018	Supply and Installation of 8 Person Elevator	GOODS	NCT	223,890.00	MS CONSULT LTD	1 Lot	
3	WACCI	UG/W/AACE-WACCI/NCT/02006/2017	Supply and Installation of Bioinformatics Equipment -High Performance Server	GOODS	NCT	496,749.69	BLINK STAR TECHNOLOGY LTD	1 Lot	
4	WACCI	UG/G/ACE-WACCI/NCT/02006A/2017	Supply and Installation of Epson LCD Multimedia Projectors (6pcs)	GOODS	RFO	21,714.00	GOODWIL SUPPLIES	1 Lot	
5	WACCI	GR/UOG/ACE-WACCI/02006/2017	Supply and Installation of Computers - Lot 1 (19 Pcs)	GOODS	RFQ	96,900.00	IT MARKET LTD	2 Lot	
6	WACCI	GR/UOG/ACE-WACCI/02006/2017	Supply and Installation of Computers - Lot 2 (5 Pcs)	GOODS	RFQ	44,500.00	IT MARKET LTD	2 Lot	
7	WACCI	UG/G/ACE-WACCI/RFQ/02009/2017	Supply and Installation of Lecture, Conference and Meeting Room Furniture	GOODS	RFQ	99,000.00	GRACE FILLED VENTURES	1 Lot	
8	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 1	GOODS	NCT	454,594.76	Arcoa Ghana LTD	1 Lot	
9	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment- Lot 2	GOODS	NCT	44,429.55	BANY LAB AND SUPPLIES	1 Lot	
10	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 3	GOODS	NCT	72,459.00	HUGE LIMITED	1 Lot	
11	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment - Lot 4	GOODS	NCT	94,620.55	SERVACO PPS LTD	1 Lot	
12	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 5	GOODS	NCT	233,713.07	WAGTECH GHANA	1 Lot	
13	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 6	GOODS	NCT	324,921.90	RESOLVE SYSTEM	1 Lot	
			TOTAL			2,952,011.52			

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2.9 Measurement of Procurement Progress Performance

2.9.1 Procurement Performance

Table 15: Satisfactory Procurement Progress Performance

				CONTRACT					CONTRACT		PROJECT
ID	ENTITY	CONTRACT NO	PROJECT NAME	AMOUNT(GHS)	CATEGORY	STATUS	PLANNING	TENDERING	ADMINISTRATION	QUALITY	OVERALL
1	WACCI	UG/AURG/WACCI/GD/NCT/002B/2018	Supply and Installation of Generator Sets	744,519.00	GOODS	COMPLETE	100.00%	94.74%	96.97%	93.33%	96.26%
2	WACCI	UG/AURG/WACCI/GD/NCT/003/2018	Supply and Installation of 8 Person Elevator	223,890.00	GOODS	COMPLETE	100.00%	91.23%	97.22%	94.44%	95.72%
3	WACCI	UG/W/AACE-WACCI/NCT/02006/2017	Supply and Installation of Bioinformatics Equipment -High Performance Server	496,749.69	GOODS	COMPLETE	95.24%	100.00%	100.00%	91.67%	96.73%
4	WACCI	UG/G/ACE-WACCI/NCT/02006A/2017	Supply and Installation of Epson LCD Multimedia Projectors (6pcs)	21,714.00	GOODS	COMPLETE	100.00%	94.74%	100.00%	100.00%	98.68%
5	WACCI	GR/UOG/ACE-WACCI/02006/2017	Supply and Installation of Computers - Lot 1 (19 Pcs)	96,900.00	GOODS	COMPLETE	100.00%	95.00%	100.00%	83.33%	94.58%
6	WACCI	GR/UOG/ACE-WACCI/02006/2017	Supply and Installation of Computers - Lot 2 (5 Pcs)	44,500.00	GOODS	COMPLETE	95.24%	95.00%	100.00%	86.67%	94.23%
7	WACCI	UG/G/ACE-WACCI/RFQ/02009/2017	Supply and Installation of Lecture, Conference and Meeting Room Furniture	99,000.00	GOODS	COMPLETE	100.00%	94.74%	100.00%	100.00%	98.68%
8	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 1	454,594.76	GOODS	COMPLETE	88.89%	95.00%	100.00%	91.67%	93.89%
9	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment- Lot 2	44,429.55	GOODS	COMPLETE	91.67%	95.00%	100.00%	91.67%	94.58%
10	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 3	72,459.00	GOODS	COMPLETE	88.89%	93.33%	100.00%	100.00%	95.56%
11	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment - Lot 4	94,620.55	GOODS	COMPLETE	88.89%	91.67%	100.00%	100.00%	95.14%
12	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 5	233,713.07	GOODS	COMPLETE	86.67%	95.00%	100.00%	100.00%	95.42%
13	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 6	324,921.90	GOODS	COMPLETE	90.48%	95.00%	100.00%	100.00%	96.37%
		OVERALL PROCUREMENT CONTR	ACTS ASSESSMENT	2,952,011.52			94.30%	94.65%	99.55%	94.83%	95.83%

Overall Performance	95.83%		
	1=Poor	0% - 49% Poor	
Evaluation Scale	2=Fair	50% - 74% Fair	
	3=Good	75% -100% Good	

2.9.2 Timely Performance

Timeliness of the performance of the procurement contracts were assessed using the procurement plan provided (attached in appendix 1). Timely performance of procurement was done based on two (2) categories to ascertained 'planned' activities of procurement against 'actual' activities of procurement;

- 1. Tendering stage
- 2. Contract Formation and Delivery stage

2.9.2.1 Tendering Stage

This stage of the procurement process could not be assessed in terms of timely procurement progress performance. This was as a result of lack of the following information on the procurement plan of the Centre;

- 1. Tender invitation dates
- 2. Tender closing/submission dates
- 3. Period of Evaluation of tenders and submission of tender evaluation reports date
- 4. Dates Approval of evaluation report by final authorities

2.9.2.2 Contract Formation and Delivery Stage

The table below (Table 15) provides detailed information on the planned activities of procurement and actual activities of procurement executed by the Centre for the procurement contracts reviewed and examined during the procurement audit.

For ten (10) procurement Contracts, the Centre exceeded their approved budgetary allocation for the procurements by US\$ 213,071.22 (UG/W/AACE-WACCI/NCT/02006/2017, UG/G/ACE-WACCI/NCT/02006A/2017,GR/UOG/ACE-WACCI/02006/2017,GR/UOG/ACE-WACCI/02006/2017, UG/G/ACE-WACCI/02009/2017,UG/ACE-WACCI/GD/NCT/02014/2017,UG/ACE). The percentage of deviation is more common in the Procurement and Supply of Tissue Culture Laboratory Equipment contract.

A total net average duration of 189 days (approximately 6.3 months) was lost in overall procurement contract formation and signing activities. In terms of contract delivery activities, the Centre could not execute planned activities of procurement within the stipulated plan periods. A total net average duration of 271 days (approximately 9.03 months) was lost in the expected contract delivery periods.

2.9.3 Payment of Invoices for Procurement Contracts

2.9.3.1 Timeliness of Payment

For the year under review, timeliness of the Center in the receipt, processing and payments of invoices submitted by contractors/suppliers/consultants was measured. For all the 13 procurement contracts reviewed, no invoice was paid beyond the twenty-eight (28) days allowed in the bidding documents (ITT). One procurement contract recorded the highest duration of 14 days after certification by the project manager. This was however found acceptable within the 28 days stipulated in the bidding and contract documents. See table 15 below

2.9.4 Delay in Payments

For the year under review, the Center recorded no delay in payments of invoices submitted by various contractors, suppliers and consultants.

2.9.5 Interest on Delayed payment

The Center recorded zero interest on delayed payment with respect to invoices submitted by various contractors, suppliers and consultants. This is attributed largely to the fact that, there was no delay in payment of invoices.

2.9.6 Claims – additional claims on loss and expenses

There was no record of contractors/suppliers/consultants submitting additional claims for loss and expenses to the Center.

2.9.7 Foreign Exchange Losses Payments

For the period under review, the Center recorded no foreign exchange losses in terms of payments for procurement contracts.

Table 16: Timely Procurement Progress Performance

No.	Contract Package	Description	Estimated Cost (Planned) US\$	Actual Cost. <mark>US\$</mark>	Diff. (US\$)	Contract Signing Date (Planned)	Contract Signing Date (Actual)	Diff. (Days)	Contract Delivery Date (Planned)	Contract Delivery Date (Actual)	Diff. (Days)
1	2	3	4	5	6	7	8	9	10	11	12
1	UG/AURG/WACCI/GD/NCT/002B/2018	Supply and Installation of Generator Sets	187,000.00	142,458.28	44,541.72	30-Mar-17	16-Feb-19	-688	28-Apr-17	13-Dec-19	-959
2	UG/AURG/WACCI/GD/NCT/003/2018	Supply and Installation of 8 Person Elevator	50,000.00	42,668.54	7,331.46	28-Feb-17	16-Feb-19	-718	30-Mar-17	14-Oct-19	-928
3	UG/W/AACE-WACCI/NCT/02006/2017	Supply and Installation of Bioinformatics Equipment -High Performance Server	79,000.00	113,912.51	(34,912.51)	28-Feb-17	23-Aug-17	-176	30-Mar-17	9-Jan-18	-285
4	UG/G/ACE-WACCI/NCT/02006A/2017	Supply and Installation of Epson LCD Multimedia Projectors (6pcs)	5,000.00	4,985.99	14.01	30-Mar-17	23-Aug-17	-146	28-Apr-17	28-Aug-17	-122
5	GR/UOG/ACE-WACCI/02006/2017	Supply and Installation of Computers - Lot 1 (19 Pcs)	22,080.00	23,107.74	(1,027.74)	30-Mar-17	9-Jun-17	-71	28-Apr-17	28-Aug-17	-122
6	GR/UOG/ACE-WACCI/02006/2017	Supply and Installation of Computers - Lot 2 (5 Pcs)	9,920.00	10,611.91	(691.91)	30-Mar-17	9-Jun-17	-71	28-Apr-17	28-Aug-17	-122
7	UG/G/ACE-WACCI/RFQ/02009/2017	Supply and Installation of Lecture, Conference and Meeting Room Furniture	20,000.00	23,608.53	(3,608.53)	30-Mar-17	11-Sep-17	-165	28-Apr-17	4-Jan-18	-251
8	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 1	31,117.62	94,974.36	(63,856.74)	30-Mar-17	9-Jun-17	-71	28-Apr-17	28-Aug-17	-122
9	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment- Lot 2	3,041.26	9,282.26	(6,241.00)	30-Mar-17	9-Jun-17	-71	28-Apr-17	28-Aug-17	-122
10	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 3	4,959.91	15,138.20	(10,178.29)	30-Mar-17	9-Jun-17	-71	28-Apr-17	28-Aug-17	-122
11	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment - Lot 4	6,476.90	20,560.17	(14,083.27)	30-Mar-17	9-Jun-17	-71	28-Apr-17	28-Aug-17	-122
12	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 5	15,997.97	48,827.55	(32,829.58)	30-Mar-17	9-Jun-17	-71	28-Apr-17	28-Aug-17	-122
13	UG/ACE-WACCI/GD/NCT/02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 6	22,241.34	67,882.98	(45,641.65)	30-Mar-17	9-Jun-17	-71	28-Apr-17	28-Aug-17	-122
		TOTAL	456,835.00	618,019.03	(161,184.03)			-2461			-3521
		AVERAGE						-189			-271

Tender Invitation Date (Planned)	Tender Invitation Date (Actual)	Tender Submission/Closing Date (Planned)	Tender Submission/Closing Date (Actual)	Diff. (Days)	Submission of Tender Evaluation Report (Planned)	Submission of Tender Evaluation Report (Actual)	Diff. (Days)	Approval by Final Authority (Planned)	Approval by Final Authority (Planned)
13	14	15	16	17	18	19	20	21	22
<u> </u>									

Table 17 Payment of Invoices 1

							EXPECTED			
ID					AMOUNT	DATE OF	DATE OF	ACTUAL DATE	DIFFERENCE	DEMADING
ID	ENTITY	CONTRACT NO	PROJECT NAME	INVOICE #	(GHS)	INVOICE	PAYMENT	OF PAYMENT	(DATES)	REMARKS
	MACCT		Constructed Installation of Constructor Cots	No. 1 No. 2	770 001 00	Various (See				
1	WACCI	UG/AURG/WACCI/GD/NCT/002B/2018	Supply and Installation of Generator Sets	No. 1 - No. 2	779,991.00	below)				
2	WACCI		Supply and Installation of 8 Person	No. 1 No. 2	222.000.00	Mariaua				
2	WACCI	UG/AURG/WACCI/GD/NCT/003/2018	Elevator	No. 1 - No. 3	223,890.00	Various				
2	MACCI		Supply and Installation of Bioinformatics		521 670 54	Mantana				
3	WACCI	UG/W/AACE-WACCI/NCT/02006/2017	Equipment -High Performance Server	No. 1 - No. 3	521,670.54	Various				
4	MACCT		Supply and Installation of Epson LCD	No. 1	21 714 00	20.07.2017				
4	WACCI	UG/G/ACE-WACCI/NCT/02006A/2017	Multimedia Projectors (6pcs)	No. 1	21,714.00	28.07.2017				
5	WACCI		Supply and Installation of Computers -	No. 1 - No. 2	127 500 00	Mariaua				
5	WACCI	GR/UOG/ACE-WACCI/02006/2017	Lot 1 (19 Pcs)	NO. 1 - NO. 2	127,500.00	Various				
6	MACCT		Supply and Installation of Computers -	No. 1	44 500 00	20.00.2017				
6	WACCI	GR/UOG/ACE-WACCI/02006/2017	Lot 2 (5 Pcs)	No. 1	44,500.00	28.08.2017				
_			Supply and Installation of Lecture,							
7	WACCI	UG/G/ACE-WACCI/RFQ/02009/2017	Conference and Meeting Room Furniture	No. 1	99,000.00	4.01.2018				
			Supply and Installation of Tissue Culture							
8	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Laboratory Equipment-Lot 1	No. 1 - No. 3	454,594.78	Various				
			Supply and Installation of Tissue Culture							
9	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Laboratory Equipment- Lot 2	No. 1	44,429.55	9.05.2018				
			Supply and Installation of Tissue Culture							
10	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Laboratory Equipment-Lot 3	No. 1	72,459.00	16.03.2018				
			Supply and Installation of Tissue Culture							
11	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Laboratory Equipment - Lot 4	No. 1	50,945.45	21.05.2018				
			Supply and Installation of Tissue Culture							
12	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Laboratory Equipment-Lot 5	No. 1	233,713.07	30.05.2018				
			Supply and Installation of Tissue Culture							
13	WACCI	UG/ACE-WACCI/GD/NCT/02014/2017	Laboratory Equipment-Lot 6	No. 1 - No. 3	324,921.90	Various				
					2 000 220 20					
					2,999,329.29					

Table 18 Payment of Invoices 2

Procurement Contract	Invoice No. 1	Invoice No. 2	Invoice No. 3	Invoice No. 4	Invoice No. 5	Total Invoices
Supply and Installation of 8 Person Elevator	180,090.00	20,600.00	23,200.00			223,890.00
Date of Invoice	20.05.2019	21.08.2019	13.12.2019			
Expected Date of Payment						
Actual date of Payment						
Supply and Installation of Generator Sets	99,122.98	680,868.02				779,991.00
Date of Invoice	12.06.2019	14.10.2019				
Expected Date of Payment						
Actual date of Payment						
Supply and Installation of Bioinformatics Equipment -High Performance Server	298,049.81	198,699.88	24,920.85			521,670.54
Date of Invoice	5.09.2017	22.01.2018	4.07.2018			
Expected Date of Payment						
Actual date of Payment						
Supply and Installation of Computers - Lot 1 (19 Pcs)	96,900.00	30,600.00				127,500.00
Date of Invoice	28.06.2017	12.07.2017				
Expected Date of Payment						
Actual date of Payment						
Supply and Installation of Tissue Culture Laboratory Equipment-Lot 1	204,919.03	190,677.82	58,997.93			454,594.78
Date of Invoice						
Expected Date of Payment						
Actual date of Payment						
Supply and Installation of Tissue Culture Laboratory Equipment-Lot 6	119,833.70	165,681.09	39,407.11			324,921.90
Date of Invoice	25.04.2018	11.07.2018	11.07.2018			
Expected Date of Payment						
Actual date of Payment						

2.10 Price Reasonableness

Table 19 Price Reasonableness Analysis

ID	Contract Package No.	Project Name	Bidder ID	Responsive Bidders	Corrected Bidder's Quotation GHS	Corrected Bidder's Quotation US\$	Center's Budget US\$	%Deviation from Centers Budget	AVERAGE of Corrected Bidders Quotation	STD. DEV. Of Corrected Bidders Quotation	Remarks
			1	G&J Technical Services	681,876.54	142,458.28	187,000.00	-23.82%			
	UG/AURG/WACCI/GD/ NCT/002B/2018	Supply and Installation of Generator Sets	2	Dizengoff Ghana Ltd	1,642,525.79	343,158.00	187,000.00	83.51%	214,104.83	111,989.89	
1			3	AA Horizone Ltd	750,036.00	156,698.21	187,000.00	-16.20%			
		Exchange Rate		4.7865							
		Tender Opening Date/ Exchange Rate Date		13.11.2018							
	UG/AURG/WACCI/GD /NCT/003/2018	Supply and Installation of 8 Person Elevator	1	ARG 1 Africa	219,450.00	46,060.36	50,000.00	-7.88%	44,364.45	2,398.38	
2	///////////////////////////////////////	Person Elevator	2	MS Consult Ltd	203,290.00	42,668.54	50,000.00	-14.66%	47,304.43	2,390.30	
		Exchange Rate		4.7644							
		Tender Opening Date/ Exchange Rate Date		24.09.2018							
		Supply and Installation of	1	Blink Star Technology Ltd	496,749.69	113,912.51	79,000.00	44.19%			
	UG/W/AACE- WACCI/NCT/02006/2017	Bioinformatics Equipment - High Performance Server	2	IT Market Ltd	940,739.32	215,726.32	79,000.00	173.07%	187,504.51	64,306.71	
3			3	IPMC	1,015,519.95	232,874.69	79,000.00	194.78%			
		Exchange Rate		4.3608							
		Tender Opening Date/ Exchange Rate Date		4.07.2017							
		Supply and Installation of	1	IPMC	22,576.14	5,183.96	5,000.00	3.68%			
	UG/G/ACE- WACCI/NCT/02006A/2017	Epson LCD Multimedia Projectors (6pcs)	2	Goodwil Supplies	21,714.00	4,985.99	5,000.00	-0.28%	5,251.64	305.16	
4			3	Ramsys Supplies	24,322.50	5,584.96	5,000.00	11.70%			
		Exchange Rate		4.355							
		Tender Opening Date/ Exchange Rate Date		27.06.2017							
			1	IPMC	136,028.90	32,438.81	22,080.00	46.91%			
	GR/UOG/ACE- WACCI/02006/2017	Supply and Installation of Computers - Lot 1 (19 Pcs)	2	Sams Firma	109,392.50	26,086.83	22,080.00	18.15%	27,211.13	4,766.05	
5			3	IT Market Ltd	96,900.00	23,107.74	22,080.00	4.65%			
		Exchange Rate		4.1934							
		Tender Opening Date/ Exchange Rate Date		8.05.2017							

ID	Contract Package No.	Project Name	Bidder ID	Responsive Bidders	Corrected Bidder's Quotation GHS	Corrected Bidder's Quotation US\$	Center's Budget US\$	%Deviation from Centers Budget	AVERAGE of Corrected Bidders Quotation	STD. DEV. Of Corrected Bidders Quotation	Remarks
6			1	IPMC	82,148.72	19,590.00	9,920.00	97.48%			
	GR/UOG/ACE- WACCI/02006/2017	Supply and Installation of Computers - Lot 2 (5 Pcs)	2	Sams Firma	48,762.50	11,628.39	9,920.00	17.22%	13,943.44	4,916.41	
	WACCI 02000/2017								13,5 13.11	1,910.11	
		Exchange Rate	3	IT Market Ltd 4.1934	44,500.00	10,611.91	9,920.00	6.97%			
		Tender Opening Date/ Exchange Rate Date		8.05.2017							
			1	IPMC	122,500.14	29,212.61	20,000.00	46.06%			
		Supply and Installation of	2	Goodwil Supplies	121,014.36	28,858.29	20,000.00	44.29%			
7	UG/G/ACE- WACCI/RFQ/02009/2017	Lecture, Conference and Meeting Room Furniture	3	Ramsys Supplies	125,372.75	29,897.64	20,000.00	49.49%	27,207.11	2,936.50	
		Meeting Room Furniture	4	Grace Filled Ventures	99,000.00	23,608.53	20,000.00	18.04%			
			5	Yebon Furniture	102,564.25	24,458.49	20,000.00	22.29%			
		Exchange Rate		4.1934							
		Tender Opening Date/ Exchange Rate Date		8.05.2017							
			1	Arcoa Ghana Ltd	454,594.76	94,974.36	31,117.62	205.21%			
			2	Bany Lab and Supplies	460,254.36	96,156.77	31,117.62	209.01%			
			3	Huge Limited	471,147.25	98,432.52	31,117.62	216.32%			
	UG/ACE-WACCI/GD/NCT	Supply and Installation of	4	MES Equipment	500,123.01	104,486.16	31,117.62	235.78%			
8	/02014/2017	Tissue Culture Laboratory Equipment-Lot 1	5	Servaco PPS Ltd	502,699.60	105,024.46	31,117.62	237.51%	105,204.06	12,250.17	
			6	Fuldako Furniture Ltd	461,254.25	96,365.66	31,117.62	209.68%			
			7	Wagtech Ghana	555,492.47	116,054.00	31,117.62	272.95%			
	1		8	Resolve System	622,908.00	130,138.51	31,117.62	318.21%			
		Exchange Rate		4.7865							
		Tender Opening Date/ Exchange Rate Date		4.07.2017							
			1	Arcoa Ghana Ltd	94,547.09	19,752.87	3,041.26	549.50%	12,466.57	3,375.81	

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ID	Contract Package No.	Project Name	Bidder ID	Responsive Bidders	Corrected Bidder's Quotation GHS	Corrected Bidder's Quotation US\$	Center's Budget US\$	%Deviation from Centers Budget	AVERAGE of Corrected Bidders Quotation	STD. DEV. Of Corrected Bidders Quotation	Remarks
			2	Bany Lab and Supplies	44,429.55	9,282.26	3,041.26	205.21%			
			2	Supplies	729.33	9,202.20	5,041.20	203.2170			
			3	Huge Limited	65,826.15	13,752.46	3,041.26	352.20%			
			4	MES Equipment	49,678.96	10,378.97	3,041.26	241.27%			
9	UG/ACE-WACCI/GD/NCT /02014/2017	Supply and Installation of Tissue Culture Laboratory Equipment- Lot 2	5	Servaco PPS Ltd	54,246.00	11,333.12	3,041.26	272.65%			
			6	Fuldako Furniture Ltd	60,241.84	12,585.78	3,041.26	313.83%			
			7	Wagtech Ghana	45,492.47	9,504.33	3,041.26	212.51%			
			8	Resolve System	62,908.00	13,142.80	3,041.26	332.15%			
		Exchange Rate		4.7865							
		Tender Opening Date/ Exchange Rate Date		4.07.2017							
		-			- /						
			1	Arcoa Ghana Ltd Bany Lab and	74,255.32	15,513.49	4,959.91	212.78%			
			2	Supplies	73,147.25	15,281.99	4,959.91	208.11%			
			3	Huge Limited	72,459.00	15,138.20	4,959.91	205.21%			
	UG/ACE-WACCI/GD/NCT/	Supply and Installation of	4	MES Equipment	74,989.63	15,666.90	4,959.91	215.87%			
10	02014/2017	Tissue Culture Laboratory Equipment-Lot 3	5	Servaco PPS Ltd	75,654.14	15,805.73	4,959.91	218.67%	15,750.81	431.60	
			6	Fuldako Furniture Ltd	76,852.23	16,056.04	4,959.91	223.72%			
			7	Wagtech Ghana	77,625.18	16,217.52	4,959.91	226.97%			
			8	Resolve System	78,147.20	16,326.59	4,959.91	229.17%			
		Exchange Rate		4.7865							
		Tender Opening Date/ Exchange Rate Date		4.07.2017							
			1	Arcoa Ghana Ltd	98,745.60	20,630.02	6,476.90	218.52%			
	UG/ACE-WACCI/GD/NCT	Supply and Installation of Tissue Culture Laboratory Equipment - Lot 4	2	Bany Lab and Supplies	95,963.00	20,048.68	6,476.90	209.54%	22,422,02	E 40E E0	
	/02014/2017		3	Huge Limited	99,852.23	20,861.22	6,476.90	222.09%	23,430.83	5,495.50	
			4	MES Equipment	94,620.55	19,768.21	6,476.90	205.21%			

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ID	Contract Package No.	Project Name	Bidder ID	Responsive Bidders	Corrected Bidder's Quotation GHS	Corrected Bidder's Quotation US\$	Center's Budget US\$	%Deviation from Centers Budget	AVERAGE of Corrected Bidders Quotation	STD. DEV. Of Corrected Bidders Quotation	Remarks				
11			5	Servaco PPS Ltd	98,411.25	20,560.17	6,476.90	217.44%							
			6	Fuldako Furniture Ltd	101,654.12	21,237.67	6,476.90	227.90%							
			7	Wagtech Ghana	145,492.47	30,396.42	6,476.90	369.30%							
			8	Resolve System	162,474.20	33,944.26	6,476.90	424.08%							
		Exchange Rate		4.7865											
		Tender Opening Date/ Exchange Rate Date		4.07.2017											
			1	Arcoa Ghana Ltd	241,123.20	50,375.68	15,997.97	214.89%							
			2	Bany Lab and Supplies	235,654.25	49,233.10	15,997.97	207.75%							
			3	Huge Limited	245,125.36	51,211.82	15,997.97	220.11%							
	UG/ACE-WACCI/GD/NCT /02014/2017	Supply and Installation of Tissue Culture Laboratory	4	MES Equipment	250,147.25	52,260.99	15,997.97	226.67%		-					
12	/02011/2017	Equipment-Lot 5	Equipment-Lot 5	Equipment-Lot 5	Equipment-Lot 5	Equipment-Lot 5	5	Servaco PPS Ltd	241,633.25	50,482.24	15,997.97	215.55%	51,451.32	2,224.50	
12					· · ·	,									
			6	Fuldako Furniture Ltd	260,456.25	54,414.76	15,997.97	240.14%							
			7	Wagtech Ghana	233,713.07	48,827.55	15,997.97	205.21%							
			8	Resolve System	262,321.25	54,804.40	15,997.97	242.57%							
		Exchange Rate Tender Opening Date/		4.7865											
		Exchange Rate Date		4.07.2017											
			1	Arcoa Ghana Ltd	455,654.25	95,195.71	22,241.34	328.01%							
13			2	Bany Lab and Supplies	370,145.25	77,331.09	22,241.34	247.69%							
		Supply and Installation of	3	Huge Limited	326,987.25	68,314.48	22,241.34	207.15%							
	UG/ACE-WACCI/GD/NCT/ 02014/2017	Supply and Installation of Tissue Culture Laboratory	4	MES Equipment	330,145.25	68,974.25	22,241.34	210.12%	73,441.79	9,336.12					
		Equipment-Lot 6	5	Servaco PPS Ltd	331,741.25	69,307.69	22,241.34	211.62%	-	-					
			6	Fuldako Furniture Ltd	327,145.25	68,347.49	22,241.34	207.30%							
			7	Wagtech Ghana	345,492.47	72,180.61	22,241.34	224.53%							

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ID	Contract Package No.		Bidder ID	Responsive Bidders	Corrected Bidder's Quotation GHS	Corrected Bidder's Quotation US\$	Center's Budget US\$	%Deviation from Centers Budget	AVERAGE of Corrected Bidders Quotation	STD. DEV. Of Corrected Bidders Quotation	Remarks
			8	Resolve System	324,921.90	67,882.98	22,241.34	205.21%			
		Exchange Rate		4.7865							
		Tender Opening Date/ Exchange Rate Date		4.07.2017							

2.10.1 Establishment of Competition

National Competitive Tendering (NCT) was the dominant method of procurement used by the Centre (9no Lots – 69%). Competitive Tendering is the default method of procurement per section 35(1) of act 663 as amended. Price Quotation (PQ) method (4no.) represented 31%. Total for competitively sourced procurmeents for the period under review constitutes 100%.

An average of 6 bidders was recorded per lot (for 7 lots) and this should guarantee adequate competition and ensure price reasonableness considering that, it is the most appropriate competitive method for procuring. Seven (7) other lots recorded an average of 4 bidders per lot which is adequate enough to guarantee price competition. Although some bidders did not meet the technical specifications of the tender documents, a minimum average of 3 bids prices were available for comparison. This feature was dominant with Price Quotation bids.

2.10.2 Percentage deviation from client's budget

The percentage deviation of lowest evaluated bidders price from the client's budget recorded an overall average of plus 98.35%. Six (6) extreme outliers were recorded for the selected contracts under review. Far above the Center's Budget recorded an average price of plus of 207.25% (UG/ACE-WACCI/GD/NCT/02014/2017- Supply and installation of Tissue Culture Laboratory Equipment – Lot 1-6) and below the Center's budget recorded an average minus 12.92% for three (3) procurement contracts.

For three (3) procurement contracts, the lowest evaluated bidder's price recorded deviations from the Center's Budget. The average deviation below the Center's estimate is minus 12.92%. However, the inspections of the supplies reveals that, the suppliers met the expectations of the Center with respect to the goods supplied. This presupposes that, the Center's estimate for the procurement contracts were comparatively high.

For ten (10) procurement contracts, the average lowest evaluated bidders price exceeded the Center's budget by plus 133.74%. The outliers in greater deviations from the Center's estimate was recorded in six (6) procurement contracts with an average deviation of plus 207.25%. The analysis and confirmation of open market prices for the items vis-à-vis the price of the competing bids was done to ascertain the variance. The standard deviation of prices of the competing bids is smaller and narrow compared to the percentage deviation of the prices from the Center's budget. This confirms the inadequate preparation of budget for the procurement contracts. See table 18 above

2.10.3 Variance of competing bids

The period under review recorded an unusually large variance between the price of competing bids (UG/AURG/WACCI/GD/NCT/002B/2018, UG/W/AACE-WACCI/NCT/02006/2017, UG/ACE-WACCI/GD/NCT/02014/2017-Lot 2)

This unusually large variance between the price of competing bids (3 procurement contracts) could suggest a lack of understanding and appreciation of the scope of works to be executed in the specific lots with this challenge.

2.10.4 Average price of competing bids

The average price of competing bids was found to be good except three (3) procurement contracts where an unusually large variance between the price of competing bids was recorded as stated in section 2.10.3 above.

Ten (10) procurement contracts award bid prices was found to be closer to the average bid price between the competing bids. See table 18 above average column.

2.11 Measurement of Procurement Transparency

2.11.1 Overall transparency Score

Public Procurement should, to the greatest extent practicable, be transparent in its practices, processes, policies and relationships with all stakeholders, while ensuring protection of confidential information. To measure transparency of the various procurement contracts reviewed and audited, twelve (12) criteria were used to collect data.

The evaluation score for the measurement of transparency was determined using the level of compliance of the Center to the 12 set criteria.

The overall transparency score of the Center is 55% for the procurement contracts that were reviewed and audited for the period. This signifies "substantial Compliance" to the transparency procurements of the Center

2.11.2 Evaluation Criteria and Results Interpretation

ID	Description	Mark
NA	Not Applicable	
NC	None Compliance	0
PC	Partial Compliance	1
SC	Substantial Compliance	2
FC	Full Compliance	3

The interpretation of the scores obtained by the Center is stated below;

ID	Interpretation of Results
1	0=[Non Compliance]
2	0-49 =[Partial Compliance]
3	50-74 = [Substantial Compliance]
4	75-100 = [Full Compliance]

The transparency of all procurement contracts was measured on the scale of "Non Compliance", "Partial Compliance", "Substantia Compliance", "Full Compliance" and "Not Applicable" with respect to the following 12 criteria. The score sheet for the evaluation of each procurement contract is in table 19 below

Table 20 Transparency Score Sheet

ID		VEV		EVALUATION SCORE						
ID	TRANSPARENCY CRITERIA	KEY	NA	NC	PC	SC	FC			
	mark			0	1	2	3			
1	Publication of Procurement Plan to PPA Website in Compliance with Section 47 of Act 663 as amended	PPW								
2	Publication of Procurement Notice in Compliance with Section 47 of Act 663 as amended	PPN								
3	Pre-Bid Meeting and Minutes of Pre-Bid Meeting circulated to all Bidders (If applicable) [Section 51(5) and 51(6)]	PBM								
4	Tender Submission Box availability & Issuance of Tender Receipt [53(8)]	TSB								
5	Public Opening of Tenders with Bidders Representatives Present (if applicable) [section 56]	POT								
6	Declaration of Conflict of Interest by Evaluation Panel Members	COI								
7	Notification to Unsuccessful Bidders - Section 65(9)	NUB								
8	Publication of Award-section 31	POA								
9	Designated Files for Procurement Contract	FPC								
10	Accurate and Adequate Record Keeping of Files – section 28	AAR								
11	Minutes of Project Meetings Recorded and Circulated (if applicable)- – section 28	MOM								
12	Complaints and Administrative Review Awareness	CAR								
	Average Score % Score of Average [average score/max score]									

2.11.3 Publication of Procurement Plan to PPA Webiste

In compliance with Section 21 of Act 663 as amended, procurement entities are required to publish invitation to tenders on the website of the Public Procurement Authority. This is to allow adequate access to the specific procurement notice by all tenderers. This is largely used to measure the level of compliance of procurement entities to transparency in procurement contracts.

Table 20 below reveals the 'substantial compliance' of the Center to the publication of its Procurement Plan (Integrated with the Procurement Plan of the University) to the website of the Public Procurement Authority. The overall score for publication of procurement plan to the PPA Website is 67%.

2.11.4 Publication of Procurement Notice

Procurement entities are required per section 47 to publish invitations to tender or prequalification by causing an invitation to be published in the Public Procurement Bulletin, on the website of the PPA. This publication when applicable, shall be published in at least one (1) newspaper of national circulation. The invitation may also be published in a relevant trade, technical publication or professional journal of wider international circulation. Not all procurement notices require the publication in one newspaper of wider circulation per section 47(1).

The overall score for this criteria is 67%. The Center scored 'substantial compliance' with respect to publication of procurement notices. This can be largely attributed to the publication of procurement notices of NCT procurements in newspapers of wider circulation. The non - publication of notices on the website of the PPA resulted in a trend with respect to publication of notices.

2.11.5 Pre-Bid Meeting and Minutes of Pre-Bid Meeting

Procurement entities may convene a meeting of suppliers and contractors to clarify and modify tender documents when necessary and applicable. Minutes of this meeting shall be circulated to all prospective bidders. Section 51(5) and 51(6) compliance level was measured for all the procurement contracts.

For the period under review, the Center did not convene any pre-Bid Meeting for any of the procurement contracts executed.

2.11.6 Availability Tender Submission Box & Issuance of Tender Receipt

In accordance with section 53 and 53(8), the Center is required to provide a tender box and issue a tender receipt to tenderers showing the date and time when its tender was received.

During the period under consideration, the Center measured 67% for 'substantial compliance' to the provision of tender box and the issuance of receipt to bidders. The score of the Center is attributable to the non-issuance of tender receipts for tender indicating the date and time tenders were received. See table 20 below.

2.11.7 Public Opening of Tenders

The public opening of tenders was measured with respect to section 56 of act 663 as amended. The Center scored 100% on the public opening of tenders. The significant performance of the Center on this criterion is largely attributed to the availability of bidder's representatives for the public opening of bids and the recording of bids received, and the record of minutes for bids opening. See table 20 below for details of score for public opening of tenders.

2.11.8 Declaration of Conflict of Interest

Good practice requires members of evaluation panels to declare conflict of interest and sign 'Conflict of Interest Declaration Forms'. Section 20E of act 663 as amended, requires the

empaneling of competent evaluation panel members to do tender evaluations. For the period under review, no conflict of interest declaration forms were seen for all the procurement contracts audited. However, competent evaluation panel members were empaneled by the Center Leader for the evaluation of bids received.

The Center recorded 33% for declaration of conflict of interest by evaluation panel members during evaluations. This is as a result of the Center empaneling competent people for evaluation but there was no conflict of interest declaration forms signed by evaluation panel members.

2.11.9 Notification to Unsuccessful Bidders

Per Section 65(9), procurement entities are required to give notice of the procurement contract in writing to unsuccessful suppliers and contractors. The Center scored 0% with respect to this criterion. This was largely attributable to the non-availability of records to confirm the notification of procurement contracts to unsuccessful bidders. See table 20 below.

2.11.10 Publication of Award

Procurement entities are required per section 31 to promptly publish notice of procurement contract awards on the website of the Authority. For the period under review, the Center published these awards on the website of the Center but did not publish same onto the website of the Public Procurement Authority.

This was reviewed as Partial Compliance of the Center to this criterion with a score of 33% for all the procurement contracts audited.

2.11.11 Designated Files for Procurement Contract/Accurate and Adequate Record Keeping of Files / Minutes of Project Meetings Recorded and Circulated (if applicable)

In accordance with section 28 of act 663, record of procurement proceedings shall be maintained adequately with designated files for all procurement contracts. Minutes of meetings and other project record proceedings shall be maintained and made available when necessary.

The Center recorded an overall score of 87%, 67% and 33% for Designated Files for Procurement Contract, Accurate and Adequate Record Keeping of Files and Minutes of Project Meetings Recorded and Circulated respectively. These scores are largely influenced by the keeping of contract files per required documentation. The filing was moderately well done and chronological. Procurement contract documentations/ records and filing were adequate.

2.11.12 Complaints and Administrative Review Awareness

The awareness of the Center in complaints and administrative review procedure was reviewed. In accordance e with section 78, 79, 80 and 81, the Center was scored an overall score of 90%. The staff involved in the Center's activities of procurement have requisite understanding and experience in complaints and administrative review procedures. Dispute resolution mechanisms are indicated in tender and contract documentations.

Table 21 Transparency Measurement

ID	CONTRACT NO	PROJECT NAME	PROCURE MENT TYPE	PROCUREM ENT METHOD USED	CONTRACT SUM @ AWARD (GHS)	TRANSPARENCY CRITERIA*													
						PPW	PPN	PBM	TSB	POT	COI	NUB	POA	FPC	AAR	MOM	CAR	AVERAG E	% SCORE
1	UG/AURG/ WACCI/GD/NCT/002B/2018	Supply and Installation of Generator Sets	GOODS	NCT	744,519.00	2	2		2	3	1	0	1	2	2	1	3	1.73	57.6%
2	UG/AURG/ WACCI/GD/NCT/003/2018	Supply and Installation of 8 Person Elevator	GOODS	NCT	223,890.00	2	2		2	3	1	0	1	2	2	1	3	1.73	57.6%
3	UG/W/AACE- WACCI/NCT/02006/2017	Supply and Installation of Bioinformatics Equipment -High Performance Server	GOODS	NCT	496,749.69	2	2		2	3	1	0	1	3	2	1	3	1.82	60.6%
4	UG/G/ACE- WACCI/NCT/02006A/2017	Supply and Installation of Epson LCD Multimedia Projectors (6pcs)	GOODS	RFQ	21,714.00	2			2		1	0	1	2	2	1	2	1.50	48.1%
5	GR/UOG/ACE- WACCI/02006/2017	Supply and Installation of Computers - Lot 1 (19 Pcs)	GOODS	RFQ	96,900.00	2			2		1	0	1	2	2	1	2	1.50	48.1%
6	GR/UOG/ACE- WACCI/02006/2017	Supply and Installation of Computers - Lot 2 (5 Pcs)	GOODS	RFQ	44,500.00	2			2		1	0	1	2	2	1	2	1.50	48.1%
7	UG/G/ACE- WACCI/RFQ/02009/2017	Supply and Installation of Lecture, Conference and Meeting Room Furniture	GOODS	RFQ	99,000.00	2			2		1	0	1	3	2	1	2	1.60	53.3%
8	UG/ACE- WACCI/GD/NCT/02014/201 7	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 1	GOODS	NCT	454,594.76	2	2		2	3	1	0	1	3	2	1	3	1.82	60.6%
9	UG/ACE- WACCI/GD/NCT/02014/201 7	Supply and Installation of Tissue Culture Laboratory Equipment- Lot 2	GOODS	NCT	44,429.55	2	2		2	3	1	0	1	3	2	1	3	1.82	60.6%
10	UG/ACE- WACCI/GD/NCT/02014/201 7	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 3	GOODS	NCT	72,459.00	2	2		2	3	1	0	1	3	2	1	3	1.82	60.6%
11	UG/ACE- WACCI/GD/NCT/02014/201 7	Supply and Installation of Tissue Culture Laboratory Equipment - Lot 4	GOODS	NCT	94,620.55	2	2		2	3	1	0	1	3	2	1	3	1.82	60.6%
12	UG/ACE- WACCI/GD/NCT/02014/201 7	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 5	GOODS	NCT	233,713.07	2	2		2	3	1	0	1	3	2	1	3	1.82	60.6%
13	UG/ACE- WACCI/GD/NCT/02014/201 7	Supply and Installation of Tissue Culture Laboratory Equipment-Lot 6	GOODS	NCT	324,921.90	2	2		2	3	1	0	1	3	2	1	3	1.82	60.6%
	TOTAL SUM & AVERAGE FOR	CRITERIA			·	2	2		2	3	1	0	1	2.62	2	1	2.69	1.71	57.1%
		% SCORE of AVE	RAGE	Max Score=3		67	67		67	100	33	0	33	87	67	33	90		

2.12 Overall Conclusion

Overall, the results of the audit was measured against the objectives of the assignment as stated in the Terms of Reference (TOR).

2.12.1 Objective 1:

"To review the procurement, contracting, and implementation processes which have been followed for a complete form to 20% of the total contracts to confirm their consistency with the

followed for a sample of up to 30% of the total contracts, to confirm their consistency with the

Credit Agreements".

- 1. Sampling of the contracts audited was done through Simple Random Sampling based on a Simplified (Cluster) sampling technique to arrive at 30% of the procurement contracts.
- 2. A total of twenty–four (24) procurement contracts packages were planned and executed by the Centre for the period under Review (August, 2018 March, 2020).
- 3. A total of seven (7) procurement contract packages representing 30.43% of the contract packages were reviewed and examined.
- 4. The seven (7) selected contract packages had a total of 13 lots which was analysed in this assignment

2.12.2 Objective 2a:

"To seek conclusions on the procurement and contracting procedures and processes followed for

the contracts"

- 1. One (1) procurement contract was not referred to the appropriate tender committee or tender review committee for concurrent approval or otherwise as a result of contract modifications during implementation (GR/UOG/ACE-WACCI/02006/2017)
- 2. For all the thirteen (13) procurement contracts audited, the Center adopted the appropriate processes and procedures and procurement method for solicitation of bids. This was found consistent with the Act 663 as amended and its regulations.
- 3. The Centre had referred all the thirteen (13) procurement contracts under review to the appropriate final contract approving authority for approval prior to award of contract.
- 4. National Competitive Tendering (NCT) was the dominant method of procurement used by the Centre (69% of contracts reviewed) in the solicitation of bids.
- 5. None publication of General Procurement Notice (GPN) by the Centre
- 6. Publication of procurement contracts awards notices on the website of the Center
- 7. Non adoption of standard procurement plan templates leading to inadequate information on procurement plan (Tender invitation dates, Tender closing/submission dates, Evaluation of tenders and submission of tender evaluation reports date, Contract Approving authorities, Approval of evaluation report by final authority dates etc)

2.12.3 Objective 2b:

"To seek conclusions on Compliance with the World Bank's general guiding principles of economy and efficiency, equal opportunity, transparency and quality including but not limited to, and to the extent possible, technical, physical completion, and price competitiveness aspects of contracts"

Guided by the principle that "open competition is the basis for efficient public procurement" the following conclusions were made;

- 1. The overall Performance Assessment and Score of the Center and Implementing Agency was assessed as 'GOOD" with a mark of 95.83% on the procurement contracts audited in terms of procurement planning, tendering and solicitation, contract administration and quality;
- 2. Nine (9) out of the thirteen (13) procurement contracts audited, used National Competitive Tendering (NCT) procurement method for the solicitation of bids. The procedures and processes engaged were found consistent with section 44 of Act 663 as amended);
- 3. Four (4) procurement contracts used Price Quotation for solicitation of bids. They were found consistent with the procedures and processes outline in section 43 of Act 663 as amended;
- Six (6) contracts had substantial variance between the cost estimates and the bid amounts received (UG/ACE-WACCI/GD/NCT/02014/2017-Lot 1- 6- Supply and installation of Tissue Culture Laboratory Equipment);
- Three (3) contracts had large variance between the cost estimates and the bid amounts received (UG/W/AACE-WACCI/NCT/02006/2017-High Performance Server, UG/G/ACE-WACCI/RFQ/02009/2017-Lecture /conference room furniture, GR/UOG/ACE-WACCI/02006/2017-Computers);
- 6. Four (4) contracts were found to have narrow variance between the cost estimates and the bid amounts received;
- 7. The procurement contracts were not published per section 31 of Act 663 as amended, however all the procurement contracts were published at the website of the Centre;
- The overall score on quality of contracts delivered/ongoing was assessed as "GOOD" at a mark of 94.83%;
- The overall score and assessment of procurement risks and red flags was rated as 34.27%. This represented 'low risk' based on the risk scale provided. Pre-Bid Phase and Contract Administration and Close Out recorded the best score in risk performance (33.33% and 33.87% respectively) with Evaluation and Award Phase recording the high risk performance (35.61%);
- 10. The overall transparency score of the Center was assessed as 55% for the procurement contracts that were reviewed and audited for the period. This signifies "substantial Compliance" to the transparency criteria;
- 11. There has not been any incident of conflict of interest recorded or seen during the procurement audit;
- 12. A total net average duration of 189 days (6.3 months) was lost in overall procurement contract formation and signing activities;

- 13. A total net average duration of 271 days (9.03 months) was lost in the expected delivery of contracts;
- 14. Timely satisfactory performance of contracts during the tendering stage could not be assessed due to lack of "planned" information on tender invitation dates, tender closing dates, evaluation and submission of tenders, etc on the procurement plan of the Centre;
- 15. Contract files contained required documentation. The filing was moderately well done and chronological. Procurement contract documentations/ records and filing were adequate;
- 16. Based on visits to stores to assess and undertake physical inspections of the goods supplied vis-à-vis the available reports, the consultants are of the considered opinion that the goods supplied met the required quality levels (by relative quantitative assessment of quality by the audit team, quality of works scored 94.83%);
- 17. One (1) procurement contract was not referred to the appropriate tender review committee for concurrent approval or otherwise as a result of contract modifications during implementation (GR/UOG/ACE-WACCI/02006/2017-Supply and installation of Computers Lot 1 -19 pcs);
- 18. For ten (10) procurement Contracts, the Centre exceeded their approved budgetary allocation for the procurements by US\$ 213,071.22 (approximately 99%);

2.12.4 Objective 2c:

"To seek conclusions on Possible improvements in the system"

- Need for Significant improvement of the filing and documentation system of the Procurement Unit of the Centre. Specific procurement contract files should be kept with 'all' files of the contract stored appropriately. Preferably 'hard cover' files should be used to enhance safe storage. Electronic Storage System should be considered in the medium to long term
- 2. Adopt Standard Procurement Plan Template in the preparation of Subsequent Procurement Plans
- 3. Initiation of steps to properly close out all procurement contracts including the preparation of project completion reports
- 4. Continuous professional training and development of the skills and capacity of the procurement unit (proactive contract close out phase)
- 5. Request for Price/Rate Analysis from bidders with large variance between bids received and estimates of Centre. This will allow price reasonableness Analysis prior to award of contract.
- 6. Review of solicitation documents prior to invitation to tenders
- 7. Seeking concurrent approval or otherwise for modifications to contract beyond 10% of original contract sums with respect to section 87 of Act 663 as amended.
- 8. Specific capacity building and training of procurement officers on Estimation and Budgeting for the Center.

2.12.5 Objective 3:

"To review the internal capacity to handle procurement efficiently, comment on the quality of procurement and contracting; and identify reasons for delays, if any"

- 1. Performance of the Centre on quality of procurement and contracting is rated as 94.83%.
 - This is considered "SATISFACTORY" and "GOOD" base on the evaluation scale of procurement performance assessment.
 - 2. The procurement structure of the Center through the University System is in consonance with Act 663 as amended, with the following present during the period of the audit:
 - a. Procurement Unit
 - b. Head of Procurement Unit
 - c. Procurement Entity
 - d. Head of Procurement Entity
 - e. Entity Tender Committee
 - f. Chairman of Entity Tender Committee
 - 3. The Centre has the internal capacity to handle procurements considering the procurement structure, systems and personnel and their educational/professional qualifications at the procurement unit and the PDMSD of the University
 - 4. There is a designated officer responsible for procurements of the Centre with over 11 years of experience in procurements.

2.13 Recommendations

Following the review and examination of the procurement contracts, the following recommendations have been put forward for the improvement of the procurement processes within the Centre:

- 1. Continuous Professional Training and Development of Staff of Procurement Unit;
- 2. Continuous Improvement of procurement contract records/documentations and filing;
- Initiation of steps to properly close out procurement contracts (issuance of Final Acceptance Certificates, discharge of Performance Security after warranty period, writing of project completion reports etc);
- 4. Seeking of Ratification for procurement contracts that had modifications during implementation in accordance with section 87 of Act 663 as amended;
- 5. Publication of contracts awarded by the Centre with the PPA for all contracts within the audit period;
- Implementation of section 64(2) when winning bids record substantially high margins between client's budget and least evaluated bidder;
 Specific capacity building and training of procurement officers on Estimation and Budgeting for the Center

3 Possible Indication of Noncompliance requiring Action

3.1 Potential Actions on Non-Compliance

For the period under review, all the procurement contracts reviewed and audited did not reveal any possible indication of non-compliance by the Center requiring any action from the Public Procurement Authority (PPA) or the World Bank.

3.2 Misprocurement

All the procurement contracts reviewed and audited during the period under review did not reveal any possible indication of misprocurement by the Center requiring any action from the Public Procurement Authority (PPA) or the World Bank.

4 Status of Mitigation Actions

This review includes an update on the progress of implementation of the risk mitigation and corrective actions from the previous procurement review and audit report for the Center.

4.1 Corrective Actions Implemented by the Center

The following corrective actions were implemented by the Center for the period under review:

- 1. Usage of appropriate procurement methods for all procurement contracts selected for review based on estimates and thresholds of the act 663 as amended
- 2. Referral of all procurement contracts to the appropriate procurement approving authority based on thresholds and method of procurement
- 3. Improvement in the overall score for procurement performance assessment and rating (92.73% per previous audit to 95.83% in current audit)
- 4. Regular update of Procurement Plan

4.2 Corrective Actions Pending/Remaining Unfinished

The following corrective actions could not be implemented by the Center following the last review and examination of procurement contracts:

- 1. Publication of notice of procurement awards
- 2. Specific training on estimation and budgeting for procurement officers
- 3. Closing out of procurement contracts with project completion reports

5 Appendices

5.1 Appendix 1: Procurement Plan of Centre

SIMPLIFIED PROCUREMENT PLAN FOR ACE PROJECT

Year 3

Institution Name: University of Ghana (UG), *Country*: Ghana **Prepared**: February 10, 2017 **By**: West Africa Centre for Crop Improvement (WACCI) **Updated**:

Approved by the Bank: Approved by: Update approved:

1	2		3	4	5	6	7	8	9	10	11
Package/Contract	Activity Description		Estimat e Cost	Type of Procure -ment	Procure -ment Method	Review by Bank (Prior/Post)	Contract Signing Date	Contract Completio n Date (planned)	Contrac t amount (US\$)	Contrac t Signing Date	Contract Executio n Infor
Ref. No.			(US\$)				(Planned)			(Actual)	
		QT Y									
UG/G/ACE-WACCI/02001/2017	Standard plastic screen houses	2	250,000	GDS	NCT	N/A	30/03/17	28/04/17			
	Farm inputs and equipment	Vrs	52,000	GDS	NCT	N/A	30/03/17	28/04/17			
UG/G/ACE-WACCI/02002/2017	Fertilizers, wheel borrows, wellington boots, processing bags, over coats, Nose masks, labelling pegs, cutlasses, punchers, racks for seed storage, herbicides and pesticides, pollination bags weather station, spad meter, tension meter, manual transplanter, GPS, digital camera, tablet for data capture, dehumidifier, etc										

1	2		3	4	5	6	7	8	9	10	11
Package/Contract	Activity Description		Estimat e Cost	Type of Procure -ment	Procure -ment Method	Review by Bank (Prior/Post)	Contract Signing Date	Contract Completio n Date (planned)	Contrac t amount (US\$)	Contrac t Signing Date	Contract Executio n Infor
									_		
UG/W/ACE-WACCI/02003/2017	Nanodrop	1	10,000	GDS	PQ	N/A	28/02/17	30/03/17			
UG/G/ACE-WACCI/02004/2017	UV spectrophotomete r	1	15,000	GDS	PQ	N/A	28/02/17	30/03/17			
	PCR Thermocycler	1	20,000	GDS	PQ	N/A	28/02/17	30/03/17	-		
UG/G/ACE-WACCI/02004/2017											
									-		
UG/G/ACE-WACCI/02004/2017	Shaking incubators (3 stacking units)	1	68,206	GDS	NCT	N/A	30/03/17	28/04/17			
UG/G/ACE-WACCI/02004/2017											
00/0/ACE-WACCI/02004/2017	-80 freezer	1	20,000	GDS	PQ	N/A	28/02/17	30/03/17			
	General Office Consumables										
	Stationery	Vrs	8,000	GDS	PQ	N/A	28/02/17	30/03/17			
UG/G/ACE-WACCI/02005/2017	Equipment Maintenance										
	Toner & Ink Cartridge										
	Printing										
UG/G/ACE-WACCI/02006/2017											
	1		1	1	L	1	I		1	1	

1	2		3	4	5	6	7	8	9	10	11
Package/Contract	Activity Description		Estimat e Cost	Type of Procure -ment	Procure -ment Method	Review by Bank (Prior/Post)	Contract Signing Date	Contract Completio n Date (planned)	Contrac t amount (US\$)	Contrac t Signing Date	Contract Executio n Infor
	Bioinformatics Equipment	Vrs	79,000	GDS	NCT	N/A	28/02/17	30/03/17			
	& Accessories								-		
UG/AURG/WACCI/GD/NCT/003/2018	Supply and Installation of 8 Person Elevator	1	50,000.0 0	GDS	NCT	N/A	28/02/17	30/03/17			
UG/G/ACE-WACCI/02006/2017	Accounting Software	Vrs	3,250	GDS	PQ	N/A	28/02/17	30/03/17			
UG/G/ACE-WACCI/02007/2017	Statistical Analysis System Software(SAS)										
		Vrs	13,000	ITC	PQ	N/A	28/02/17	30/03/17			
UG/G/ACE-WACCI/02008/2017	Lecture room equipment and accessories 1	Vrs	65,000	GDS	NCT	N/A	30/03/17	28/04/17			
UG/G/ACE-WACCI/02008/2017	Lecture room equipment and accessories 2	Vrs	20,000	GDS	PQ	N/A	30/03/17	28/04/17			
UG/G/ACE-WACCI/02008/2017	Lecture room equipment and accessories 3	Vrs	5,000	GDS	PQ	N/A	30/03/17	28/04/17			
UG/G/ACE-WACCI/02009/2017	Conference and meeting room equipment and accessories	Vrs	120,000	GDS	NCT	N/A	30/03/17	28/04/17			
UG/G/ACE-WACCI/02010/2017	Cold room equipment and accessories	Vrs	30,876	GDS	NCT	N/A	30/03/17	28/04/17			
GR/UOG/ACE-WACCI/02006/2017	Cold Room Computers and Accessories (Lot 1 and 2)	Vrs	32,000	GDS	PQ	N/A	30/03/17	28/04/17			
UG/G/ACE-WACCI/02011/2017	Table top fridge	8	8,625								
00/0/ACE-WACCI/02011/2017	Air conditioners	7		GDS	PQ	N/A	28/02/17	30/03/17			

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1	2		3	4	5	6	7	8	9	10	11
Package/Contract	Activity Description		Estimat e Cost	Type of Procure -ment	Procure -ment Method	Review by Bank (Prior/Post)	Contract Signing Date	Contract Completio n Date (planned)	Contrac t amount (US\$)	Contrac t Signing Date	Contract Executio n Infor
UG/G/ACE-WACCI/02012/2017	Office safe	1	600	GDS	DO	NI/A	20/02/17	20/02/17			
	Seed science laboratory equipment		13,206	GDS	PQ	N/A	28/02/17	30/03/17			
UG/G/ACE-WACCI/02013/2017	(Refractometer, sterilizer, incubator, mill, oven, growth chamber, flow hood, drying platform, steel trolley, spiral separators, colour sorter and analytical sorter, threshers, tissue grinder)	Vrs		GDS	PQ	N/A	28/02/17	30/03/17			
	Procurement Audit	1		CS	NCT						
UG/AURG/WACCI/GD/NCT/002B/201 8	Supply and Installation of Generator Sets	Vrs	187,000	GDS	NCT	N/A	30/03/201 7	28/04/2017			
UG/G/ACE-WACCI/02014/2017	Tissue Culture laboratory equipment	Vrs	83,835	GDS	NCT	N/A	30/03/17	28/04/17			

5.2 Appendix 2: TOR of Assignment THE ENGAGEMENT OF PROCUREMENT AUDIT CONSULTANTS

1. Introduction

The Africa Centers of Excellence (ACE) Project was instituted in 2013 by the Governments of Nigerian, Ghana, Benin Republic, Togo, Burkina Faso, Cameroun and Senegal with support from the World Bank, to promote regional specialization amongst participating universities in the West and Central Africa sub-region within disciplines that address particular common regional challenges. It also aims at strengthening the capacities of these universities to enable them deliver high quality training and applied research.

The Government of Ghana and the International Development Agency (IDA) of the World Bank (WB) entered into a credit agreement (Credit Number 5415-GH) to finance the ACE project. To implement the project, the government of Ghana has secured US\$16.0 million credit from International Development Association (IDA) for the 2 ACEs at University of Ghana.

The objective of the ACE project among others;

- Meet the labor market demands for skills within specific areas where there are skill shortages affecting development, economic growth and poverty reduction;
- The project will, on a demand basis, invest in well performing universities that can start building a foundation for Africa to increase knowledge and technology absorption, and build knowledge-based competitive advantages.
- The project design is innovative and cross-sectoral. It is envisioned to herald in a new wave and modality of support to African higher education.
- The project will generate lessons on the impact of the following key aspects for Africa's higher education: (i) creating a pattern of regional specialization among African universities; (ii) assisting African higher education institutions to tightly link their education and research with the region's development needs; (iii) using results-based financing; (iv) developing dynamic institutions that gradually become more independent financially, managerially, and administratively; and (v) helping African institutions meet international quality standards.

The ACE Ghana intends to engage the services of Procurement Audit Consultants to carry out the procurement audit of the 2 ACEs (WACCI and WACCBIP) from inception to date.

1.1 Using the World Bank's Procurement Guidelines (the Guidelines), the ACEs (WACCI and WACCBIP) seek to assure themselves that procurement and contracting are carried out in accordance with the procedures specified in the Credit Agreements or authorized by the World Bank through formal waivers.

1.2 Credit Agreement specifies in detail, review procedures as applicable to the Client:

- i. "Prior Review": Under this project, since the objective is to focus on Disbursement Linked Indicators which would be assessed by the agreed result, all the procurement activities will only be subject to post review. However, Borrower and Bank has agreed to allow the ACEs use the university thresholds in the implementation of the project
 - ii. For contracts on account of which disbursements are made on the basis of Statements of Expenditure (SOE), the World Bank reviews these contracts and their award decisions ex-post, either in the field during the World Bank's supervision missions or by contracting with independent, third-party Procurement Consultant to carry out such audits on the Client's behalf.

1.3 The World Bank requires the use of its Standard Bidding Documents (SBD) and Standard Documents for Prequalification and Bid Evaluation in International Competitive Bidding, and Standard Requests for Proposals (for consulting services).

- 1.4 The procurement audit plays an important role in our responsibility by:
 - i. creating a deterrent to negligence in procurement management, decision-making and oversight, to ensure that an environment conducive to corrupt and fraudulent practices is not allowed to develop and that any such practices are brought to light and eliminated; and
 - ii. Monitoring both procurement and review functions and stimulating corrective action by the appropriate parties wherever non-compliance or deficiencies are identified.

2. Objective

- 2.1 The objective of the procurement audit is to review the procurement, contracting, and implementation processes which have been followed for a sample of up to 30% of the total contracts, to confirm their consistency with the Credit Agreements.
- 2.2 The purpose of the audit is to seek conclusions on:
 - i. the procurement and contracting procedures and processes Followed for the contracts;

- ii. compliance with the World Banks general guiding principles of economy and efficiency, equal opportunity, transparency and quality including but not limited to, and to the extent possible, technical, physical completion, and price competitiveness aspects of contracts; and
- iii. possible improvements in the system.

3. Scope of the Procurement audit

3.1 The procurement review will cover a sample of up to 30 percent of total contracts.

Contract Name	Contract No.	Contract Amount

The consultant will select the sample to be reviewed, in accordance with the criteria specified in Annex 1 to the TOR.

- 3.2 Under the review of the procurement transactions, the consultant should conduct a thorough review of contracts that have been selected. For some of the contracts selected, and as appropriate, the project sites should be visited to conduct physical inspections of quality and quantity of goods, works and services procured. Where appropriate, and to the extent practicable, prices should also be compared with similar contracts financed by other agencies in the country or compared with market prices.
- 3.3. To cover systematically the various objectives, the audit should focus its review on the following main areas:
 - i. determine whether the procedures, processes and documentation for procurement, contracting and reviews were in accordance with the Credit Agreements, and procurements carried out achieved the expected economy and efficiency;
 - ii. determine, to the extent possible, whether identified non-compliance with the Credit Agreements, inappropriate practices or questionable decisions/actions, may have been related to corrupt practices;
 - iii. review our internal capacity to handle procurement efficiently; comment on the quality of procurement and contracting; and identify reasons for delays, if any. Determine

whether adequate systems are in place for procurement planning, implementation and monitoring and if documentation is maintained as per required standards and can be relied upon;

- iv. verify, to the extent possible, whether Goods, Works and Consulting Services contracted were supplied/completed according to the required specifications and technical standards and comment on the reasonableness of prices.
- v. in the light of deficiencies, identify improvements in the procurement and contracting systems.

4. Methodology

- 4.1 The procurement review should follow three broad phases:
 - i. Prior to undertaking the assignment and commencement of work, a procurement discussion on the selected contracts, finalization of the work plan for the review and obtaining of the essential information on the contracts, should be held with the coordinating officer;
 - ii. Field review work in our offices to take approximately 3days for each Center.
 - iii. Preparation of the Final procurement audit Report following discussions of the draft Report.
- 4.2 The consultant is expected to select the sample of contracts to be reviewed and to obtain prior agreement to the sample and work plan before commencing implementation of the services. If the consultant should find it necessary, during the conduct of the review, to introduce variations to the number, nature and other aspects of contracts to be reviewed, such changes should be agreed in advance.

5. Procurement Audit Report

- 5.1 At the completion of the review, and prior to completing the Final Report, the consultant will present their preliminary findings in the form of a Draft Report in one original and one electronic copy.
- 5.2 The Final Report, in one original and one electronic copy, should focus on the review findings and recommendations. Details of the review methodology and procedures, evidence substantiating the findings, and elaboration on the recommendations should be covered in the annexes.

- 5.3 Except as otherwise justified by the consultant, the report should be structured as follows:
 - Summary of findings and recommendations.
 - Outline of the audit:
 - Objectives and Terms of Reference:
 - Scope, approach and review sample.
 - Findings on matters relating to:
 - procurement:
 - Organization (ACE -WACCI and WACCBIP) issues, including specific procurement and contracts:
 - general issues.
 - Recommendations for improvements.
 - Appendixes:
 - 1. Terms of Reference.
 - 2. Audit Methodology.
 - 3. Audit Data (by contract)
 - details of all audit findings with evidence substantiating all findings;
 - tables and graphs illustrating the detailed analysis carried out during the audit.
- 5.4 We will review the Draft Report and furnish the consultant with our comments. We will address all of the findings and recommendations. The consultant shall not be required or expected to change the findings or the Report to reflect our comments. If there is a disagreement between the Client and the consultant, the consultant should retain the findings and recommendations, but must incorporate the Client's position, verbatim, in the Report making it clear that this is the Client's position on the issue.
- 5.5 All reports will be in the English language.

6. Time Schedule

- 6.1 The review work will take place mainly in the 2 ACEs at University of Ghana which is expected to take approximately 4 weeks. The review shall be completed and Final Report presented to the client within 4 weeks from the date of signature of the contract between the consultant and the Client.
- 6.2 The consultant shall finalize the Work Plan within 2 calendar days of commencement of the services. Any major changes in the Work Plan must be agreed with the Client in advance.

- 6.3 The Draft Report shall be presented within 5 days from the date of commencement of the services. (The draft report shall be presented within 5 calendar days from the date of concluding the exercise at the scheduled Centers)
- 6.4 The Client will furnish its comments in writing on the Draft Report within 5 calendar days of receipt of the report. The Final Report shall be submitted to the Client within 5 calendar days after the Client has furnished the consultant its comments in writing on the Draft Report.
- 6.5 If acceptable, the Client shall approve the Final Report within 5 working days; if not, the Client will specify reasons and require the consultant to address them and resubmit the Final Report for acceptance.

7. Data, Documents, Services and Facilities

- 7.1 The Client will make available to the consultant the documents and information listed in Annex 2 to the TOR.
- 7.2 The documents and information listed in Annex 3 to the TOR will be available from the Client. Much of this information will be in the client's contract files and the consultant should be prepared to review and inspect this information in the Client's office.
- 7.3 The consultant should work in close co-ordination with the staff of the client for the review work to be performed. As far as practicable, the consultant should give the client advance notice of the information and documents which they will require and to arrange for site visits.
- 7.4 The Client will nominate a contact person or persons to facilitate the work of the consultant and provide liaison, assistance and co-ordination. The Client's contact person will be the main means of communication between the consultant and the Client.
- 7.5 The Client's staff responsible for this assignment will be:

PROF. ERIC DANQUAH Director/Centre Leader, WACCI ACE Telephone: **0244632088** E-mail: **edanquah@wacci.ug.edu.gh**

PROF. GORDON AWANDARE

Director/Centre Leader, WACCBIP Telephone: **0543717697** E-mail: **gawandare@hotmail.com**

8. Reporting

8.1 The primary output of the audit will be the Draft Final Report and the Final Report, which shall be the sole responsibility of the consultant and shall represent the opinions of the consultant.

9. Profile of The Procurement Consultants

The Procurement audit will be carried out by a team of professionals in similar field with relevant and comprehensive experience in Procurement functions especially in World Bank financed projects. The key personnel will have to be experienced in Procurement functions and would have done similar procurement audit for reputable organizations in the last 5 years. Experience of World Bank financed projects will be an added advantage.

a. One (1) Senior Procurement/Contract Management Professional with Research/ Engineering background and with a minimum of 10 years' post-qualification experience.

1. DURATION OF THE ENGAGEMENT

The Procurement audit will be approximately 4 weeks per ACE Project Centre. The consultant shall prepare his proposal on this estimate or the number of days he believes necessary to successfully complete the exercise.

S/NO	ISSUES IDENTIFIED	RECOMMENDATIONS	Centre's Responses/Remarks
1	Notification to unsuccessful bidders	 Notification of contract awards to unsuccessful bidders Publication of award of contracts especially NCT Procurements 	1.Centre is willing to notify all unsuccessful bidders 2.Publication of procurement contracts shall be done
2	Publication of contract awards with PPA (done for via Centre website)	1. Publication of procurement contracts awarded with the PPA	1.Publication of procurement contracts shall be done
3	In-adequate modification of tender and contract data sections of STD's	 Review of all solicitation documents before issuance 	1.Head of procurement Unit/senior procurement officer shall always review all solicitation documents after preparation

5.3 Appendix 3: Exit Conference Notes & Response of Centre

5.4 Appendix 4: Procurement Audit Tools and Explanatory Notes

Guidelines for Use of Procurement Risks (Red Flags) Checklist

Note:

The auditor is required to use his or her professional judgment when completing the Checklist

The risk assessment of all procurement contracts is qualitative based on available documentations provided in procurement files.

When Checklists have been completed for all sampled procurements in a procurement audit, all Checklists shall be submitted to the Team Leader for report compilation.

It is important to note that a detected red flag is not in itself evidence of high risk. However, the higher the number of red flags detected, the higher the likelihood that the risk levels are high in the procurement contract.

Objective of the Checklist

The objective of this *Checklist* is to provide a tool for the Procurement Audit Team to collect information about possible risks in the procurements carried out by procuring entities.

When to use the Checklist?

The Checklist is applicable to procurement audits. For every procurement contract sampled for auditing, a procurement risk Checklist shall be completed by the auditor as part of his or her auditing of the various phases of the procurement.

How to use the Checklist?

The Checklist consists of statements ("Risks" or "red flags"), each of which must be thoroughly considered by the procurement auditor when auditing a procurement contract. For each statement, the auditor must assess whether the statement is of low risk, medium or high risk based on a true or false response, or whether the statement is not relevant to the procurement contract in question. Based on the assessment, the auditor must tick one of four (4) possible boxes: "Not applicable = 0". "Low risk = 1", "medium risk = 2", or "High risk = 3. The four (4) boxes are to be used as follows:

Not applicable = 0

Indicates that the risk is not relevant to the method of procurement used for the procurement contract in question. For example, (*The tender is not packaged with other tenders for similar goods*) only applies to procurement of goods, as the problem of splitting contracts is not relevant to services. When completing the Red Flags Checklist for a major works or services procurement, the auditor hence ticks "*Not applicable*" for this red flag. Similarly, (*Insufficient advertising*) does only apply to procurements using competitive methods for which advertisement is a requirement. When completing the Red Flags Checklist for a request for price quotation, the auditor hence ticks "Not applicable". In other words, the auditor is required to use his or her professional judgment when completing the Checklist

The "*Not applicable*" box shall also be used if insufficient documentation is available to assess whether a red flag exists or not.

High Risk = 3

Indicates that the auditor is able to verify the red flag based on the available documentation. For example, (*The same Evaluation Committee members are involved in many procurements*), the assessor must look into the appointment letters of Evaluation Committee members for the specific procurement and compare these with appointment letters in other procurements, in order to establish if there is an unnaturally high overlap between the two. If this is the case, the auditor will verify this red flag by ticking "3".

Low Risk = 1

Indicates that the auditor is able to falsify the red flag based on the available documentation. For example, (*Major similarities between competing bids*), the auditor must compare the formats, content, prices of all submitted tenders in order to detect major similarities. If such similarities are not found, the auditor falsifies this red flag by ticking "1".

Medium Risk = 2

Indicates that the auditor is not able to entirely falsify the red flag based on the available documentation.

Project				
Contract No.				
Supplier/Contractor				
Contract Sum				
Contract Period				
Date of Procurement Audit				

S/N	PROCUREMENT RISK (RED FLAG)	EVALUATION SCORE		E	
		NA	L	м	н
А	Pre-bid phase	0	1	2	3
1	The procurement is not in the procurement plan				
2	The objective of the procurement is unclear or vague				
3	Insufficient or inconsistent planning timeframe applied				
4	The tender is not packaged with other tenders for similar goods (i.e. splitting/Bulk Breaking)				
5	Significant deviations from standard bidding documents				
6	Technical specifications are weak or unclear				
7	Technical specifications are narrow or appear tailored				

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S/N	PROCUREMENT RISK (RED FLAG)	EVALUATION SCORE			E				
		NA L M		NA L M		NA L		м	Н
8	Selected procurement method does not observe existing thresholds								
9	Insufficient advertising								
10	Inadequate time given for preparing bids								
11	Lack of mandatory approvals by appropriate authority								
12	Inaccurate minutes of pre-bid meetings								
13	Clarifications are not circulated to all bidders								
14	Incomplete records of the pre-bid phase								
	Average Performance Pre-bid phase Stage								
В	Evaluation and award phase	0	1	2	3				
1	Evaluation Committee members do not have the technical expertise necessary								
2	The evaluation is being conducted by a small number of persons (less 3)								
3	The same Evaluation Committee members are involved in many procurements								
4	Qualified bidders are voluntary dropping out of tender process								
5	Disqualification of bidders on minor technicalities								
6	Unreasonable delays in evaluating the bids and awarding the contract								
7	Evaluation criteria are amended after receipt of bids								
8	Narrow variance between the cost estimate and the bid amounts received								
9	Major similarities between competing bids (e.g. similar format, errors, prices)								
10	Unusually large variance between the price of competing bids								
11	The same shareholders are involved in several bids using different company names								
12	Failure to disqualify bids despite major errors								
13	Falsification of submitted documentation (e.g. authorisations, CVs, etc.)								
14	Failure to publicise award decisions simultaneously to all bidders								
15	Contract is not in conformity with bid documents (e.g. specification or quantities)								
16	Non-responsive bids are made responsive as result of clarification from procuring entity								
17	Quality criteria are not defined in the contract								
18	Incomplete records of evaluation and award								
	Average Performance Evaluation and award phase Stage								

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S/N	PROCUREMENT RISK (RED FLAG)	EVALUATION SCOR			E
		NA	L	L M	
С	Contract management and Close Out phase	0	1	2	3
1	Negotiation team does not include adequate technical expertise				
2	Minutes of the negotiations are not in line with Terms and Conditions of Contract				
3	Contract specifications altered after award of contract				
4	Contract is not signed by duly authorised officer				
5	Failure to deliver the quality specified in contract				
6	Failure to deliver the right quantities of goods and materials				
7	Delays in delivery of goods, works or services				
8	Replacement of nominated consultant by less qualified personnel				
9	Instructions are not given in writing to contractors/Suppliers				
10	Cost overruns are inadequately justified				
11	Contract variations are not approved by appropriate authority				
12	Failure to impose liquidative damages in case of delays				
13	Failure to make progress payments or final payment within stipulated timeframe				
14	Failure to pay retention money in a timely manner				
15	Double payment of supplier				
16	No or insufficient evaluation of the contractors' quality of performance				
17	Client dissatisfaction with completed products				
18	Incomplete contract management records				
19	Failure to write project completion reports				
	Average Performance Contract management and Close Out				
	Overall Project Performance				
			0=NA	0%	
			1=L	0% - 3	9%
	Evaluation Scale		2=M	40% -	59%
			3=H	60% -	
IA=Not	Applicable, L=Low Risk, M=Medium and H=High Risk				

S/N	ASPECT	EVALUATION SCORE		CORE
		POOR	FAIR	GOOD
А	Planning Stage	1	2	3
1	Was the project in the approved/revised budget?			
2	Was the project in the approved procurement plan?			
3	Was the procurement plan/revised procurement plan approved/followed?			
4	Was the Consultant timely engaged before the Contractor?			
5	Was the Need/Problem properly identified?			
6	Was feasibility study/survey carried out correctly before detailed designs?			
7	Were designs and drawings complete and adequate?			
8	Were engineer's estimates prepared and adequate?			
9	Were BoQs for the works prepared and adequate?			
10	Were Technical Specifications, including Specifications of Particular Application, written properly?			
11	Were bidding documents satisfactorily prepared?			
	Average Performance Planning Stage			-
В	Tendering/Solicitation Stage	1	2	3
1	Was tender notice in compliance with Section 47 of PPA 2003 or 2016?			
2	Were the tender documents & tender documents availability to all prospective bidders in compliance with Section 49 & 50 of PPA 2003 or 2016?			
3	Was the procurement method used in line with Section 34A of PPA 2016 or Part IV of PPA 2003?			
4	Was the selected contractor appropriate with respect to the size of the Procurement Contract (Goods/works/Services)?			
5	Were appropriate bidding documents used in compliance with Section 50 of PPA 2003 or PPA 2016?			
6	Was the Invitation to tenders/prequalification and shortlist carried out as per Section 47 of PPA 2003 or 2016?			
7	Were evaluation and award in line with the PPA 2003 or 2016?			
8	Was adequate time given to bidders in compliance with Section 53 of the PPA 2003 or 2016?			
9	Were clarifications (if any) communicated to all bidders?			
10	Was the tender evaluation committee constituted as per Section 19 of PPA 2003 or Section 20E of PPA 2016?			
11	Was the tender evaluation report comprehensive?			

12	Was the approval for award by the ETC in compliance with PPA 2003 or 2016?			
13	Were unsuccessful bidders notified in line with Section 65 (9) of PPA 2003 or 2016?			
14	Were awards published in line with Section 31 of PPA 2003 or 2016?			
15	Were minutes of Tender Committee meetings properly prepared?			
16	Was the procurement process efficient in comparison with the standard procession times?			
17	Were contract documents adequately prepared?			
18	Was the contract properly signed?			
19	Were records for this tender properly kept and readily available?			
20	Were there any other deviation from PPA 2003 or 2016?			
	Average Performance Procurement Stage			
С	Contract Administration	1	2	3
1	Did the contractor submit the performance bond? (If applicable?)			
2	Did the Contractor submit a contractually complying Advance payment Bond? (If applicable)			
3	Was the work program prepared, approved and satisfactory?			
4	Was the Good supplied/work implemented according to the approved Delivery Schedule/work program? (within contract period)			
5	Were site meetings held regularly as per the contract?			
6	Was the project completed in time?			
7	Were the variations approved according to laid down procedure?			
8	Were extensions of time contractually justifiable and were legally approved?			
9	Was the project completed within the approved budget (Including approved variations)?			
10	Did payment certificates include measurement sheets/Valuations/Invoices?			
11	Was the Supplier/contractor paid in accordance with provisions in the contract?			
12	Are the records of selecting and testing of the materials used and completed works complete and adequate?			
13	Were claims properly managed?			
14	Were site Instructions properly and timely issued?			
15	Was the snag list prepared and signed by parties? (Client, Consultant, Contractor)			

16	Was Final Certificate Issued and on time?			
17	Were communications from the contractor/Supplier timely acted upon?			
18	Were liquidated damages contractually claimed for delayed completion?			
19	Any other aspect noted (specify)? Record keeping			
	Average Performance Contract Administration and Quality Aspects			
D	Quality of Product/Works	1	2	3
1	Was there a quality assurance plan (supervision, stage approvals, testing and test results)?			
2	Were the materials tested and approved?			
3	Were there stage approvals? (where applicable)			
4	Were specifications adhered to?			
5	Are the dimensions (lay out) in accordance to drawings?			
6	Quality of materials used and completed works assessment			
7	Floor (assess general quality appearance)			
8	Walls (assess general quality appearance)			
9	Roof (assess general quality appearance)			
10	Ceiling (assess general quality appearance)			
11	Doors (assess general quality appearance)			
12	Windows (assess general quality appearance)			
13	Ironmongeries (assess general quality appearance)			
14	External works			
15	Were final inspections carried out properly?			
	Average Performance Quality of Works			
	Overall Project Performance			
		1=Poor	0% - 49%	Poor
	Evaluation Scale	2=Fair	50% - 749	% Fair
		3=Good	75% -100	% Good

Procurement Performance Measurement

ID	TRANSPARENCY CRITERIA	KEY	EVALUATION SCORE				
ID	TRANSPARENCE CRITERIA	NE I	NA	NC	PC	SC	FC
	mark			0	1	2	3
1	Publication of Procurement Plan to PPA Website in Compliance with Section 47 of Act 663 as amended	PPW					
2	Publication of Procurement Notice in Compliance with Section 47 of Act 663 as amended	PPN					
3	Pre-Bid Meeting and Minutes of Pre-Bid Meeting circulated to all Bidders (If applicable) [Section 51(5) and 51(6)]	PBM					
4	Tender Submission Box availability & Issuance of Tender Receipt [53(8)]	TSB					
5	Public Opening of Tenders with Bidders Representatives Present (if applicable) [section 56]	POT					
6	Declaration of Conflict of Interest by Evaluation Panel Members	COI					
7	Notification to Unsuccessful Bidders - Section 65(9)	NUB					
8	Publication of Award-section 31	POA					
9	Designated Files for Procurement Contract	FPC					
10	Accurate and Adequate Record Keeping of Files – section 28	AAR					
11	Minutes of Project Meetings Recorded and Circulated (if applicable)- – section 28	MOM					
12	Complaints and Administrative Review Awareness	CAR					
	Average Score						
	% Score of Average [average score/max score]						

ID	Description	Mark
NA	Not Applicable	
NC	None Compliance	0
PC	Partial Compliance	1
SC	Substantial Compliance	2
FC	Full Compliance	3

ID	Interpretation of Results
1	0=[Non Compliance]
2	0-49 =[Partial Compliance]
3	50-74 = [Substantial Compliance]
4	75-100 = [Full Compliance]

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[PROCUREMENT AUDIT REPORT - WACCI]

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AGUA		A.G. I.A	MCHIS	A.C.I.A.	MGHIS	PROFESSIONAL QUALIFICATIONS (as many as possible list) A.G. IA.
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8 Mrs	SANZ	great	8 YEAR	ILVEARS	& 9 YEARS	YRS OF EXPEREINCE AT CURRENT UNIT

5.5 Appendix 5: Educational and Professional Qualifications of PU & PDMSD

INTERNAL CAPACITY TO HANDLE PROCUREMENT KEY STAFF OF PHYSICAL DEVELOPMENT & MUNICIPAL SERVICES DIRECTORATE

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INTERNAL CAPACITY TO HANDLE PROCUREMENT KEY STAFF OF PROCUREMENT UNIT

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5.6 Appendix 6: Pictures of Procurement Contracts [See attached file]

5.7 Appendix 7: Management Comments on Key Findings

5.8 Appendix 8: Specific Procurement Contracts Data [See attached file]