



FINAL REPORT BY THE ASSURANCE TEAM
ON
THE MATERIAL PROJECT INFORMATION PROVIDED
BY
THE MINISTRY OF EDUCATION
ON
THE CONSTRUCTION OF MPONGWE (B) BASIC SCHOOL

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List of Acronyms

AT	Assurance Team
ARE	Assistant Resident Engineer
BoQ's	Bill of Quantities
CoST	Construction Sector Transparency Initiative
DEBS	District Education Board Secretary
DESO	District Education Standards Officer
GRZ	Government of the Republic of Zambia
MOE	Ministry of Education
MOH	Ministry of Health
MPI	Material Project Information
MSG	Multi Stakeholder Group
MWS	Ministry of Works and Supply
NCB	National Competitive Bidding
NCC	National Council for Construction
NRFA	National Road Fund Agency
PEs	Procuring Entities
QCBS	Quality and Cost Based Selection
RDA	Road Development Agency
SATCC	Southern Africa Transport and Communications Commission
SIS	School Infrastructure Section
ZMK	Zambian Kwacha
ZPPA	Zambia Public Procurement Authority

1. Executive Summary

- 1.1. The Construction Sector Transparency Initiative (CoST) is a multi-stakeholder initiative aimed at increasing transparency and accountability in the construction sector through improved disclosure of material project information.
- 1.2. CoST is being piloted in seven countries; Ethiopia, Malawi, Philippines, Tanzania, United Kingdom, Vietnam and Zambia and is supported by the Department for International Development (DfID) of the United Kingdom.
- 1.3. In Zambia, four institutions involved in infrastructure development and maintenance; Ministry of Education, Ministry of Health, Buildings Department under the Ministry of Works and Supply and Road Development Agency, were selected for the pilot study.
- 1.4. The Construction of the Mpongwe (B) Basic School was one of the projects selected under the Ministry of Education.
- 1.5. In 2007, the Ministry of Education launched the National Implementation Framework, 2008 – 2010, which sets out Government's strategies and priorities in effecting the Education for All Policy in accordance with the Fifth National Development Plan (FNDP). In the high school education sub-sector, the provision of more classrooms and the training of teachers are the key investment areas.
- 1.6. The Ministry of Education has adopted a standard design for all High Schools being built in the Country. The design of the high schools is based on the original design by Ndilila and Associates. The appointment of Ndilila and Associates was in accordance with World Bank Procurement Guidelines.
- 1.7. Following an open bidding process, Hua Jiang Investments was awarded the contract for the construction of Mpongwe B Basic School at the contract amount of ZMK7,337,248,315.61 with a completion period of 30 months.
- 1.8. The works are being supervised by Schools Infrastructure Section (SIS) in accordance with the procedures set out in the 2010 Infrastructure Operational Development Plan. However, the Ministry has not stationed a Clerk of Works at the site. This arrangement has the potential to adversely affect the effective and efficient execution of the project.

1.9. There is no Clerk of Works stationed at the site. This arrangement has the potential to adversely affect the efficient and effective execution of the project.

1.10. On the basis of the information disclosed, we are satisfied with the progress.

1.11. The major issue of concern is delayed payments and inadequate preparation for the project.

2 Introduction

2.1 Construction Sector Transparency Initiative

- 2.1.1 The Construction Sector Transparency Initiative (CoST) is a multi-stakeholder initiative aimed at increasing transparency and accountability in the construction sector. CoST intends to ensure that national governments, affected stakeholders, and the wider public get what they pay for in public construction projects, by increasing transparency in the construction sector. It is expected that greater transparency, through greater disclosure of project information, will yield benefits to government, industry, civil society, and ordinary citizens.
- 2.1.2 It is, however, recognised that the disclosure of this information may not be sufficient on its own to achieve greater accountability. This is because some of the information is likely to be complex and not easily intelligible to the general public. For example, there are many reasons for time and cost overruns on construction projects that may be quite legitimate and not necessarily an indication of poor governance of the procurement process.
- 2.1.3 CoST is being piloted in seven countries; Ethiopia, Malawi, Philippines, Tanzania, United Kingdom, Vietnam, and Zambia and is supported by the Department for International Development (DFID), UK.
- 2.1.4 In Zambia, the National Council for Construction, on behalf of the Construction Sector Transparency Initiative (CoST) Zambia Multi Stakeholder Group (MSG) contracted an Assurance Team (AT) in May 2010, to undertake assurance services on selected public construction projects ranging from roads to health and school infrastructure to ensure that the information released is both accurate and in a form that can easily be understood by stakeholders.
- 2.1.5 A total of 17 projects have been selected for the pilot and the Construction of the Mpongwe (B) Basic School is one of them.
- 2.1.6 The Assurance Team comprises four specialists in construction working together to obtain, verify and assess material project information and provide reports. This report has been prepared by the Assurance Team in accordance with its Terms of Reference and gives the activities undertaken and its opinion on the material project information (MPI) released by the Ministry of Education on the construction of the Mpongwe (B) Basic School.

2.2 Objectives of the study

- 2.2.1 The Zambian pilot has four objectives:

- to learn lessons to help in the development of CoST

- to learn lessons on improving transparency through the disclosure of project information
- to gain an improved understanding of construction project costs amongst public sector clients
- to learn and share lessons on the management and control of publicly-funded construction projects.

2.2.2 The Assurance Team has been contracted to carry out the following tasks on the project:

- Collect the material project information;
- Verify the accuracy of the material project information;
- Report on the extent and accuracy of the information which has been released;
- Analyse the material project information and make informed judgements about the cost and quality of the project;
- Report on the findings regarding the cost and quality of the project and highlight any outstanding issues of concern.

2.3 Project Description and Location

2.3.1 The Project is located in Mpongwe District in the Copperbelt province about 250 Kilometers from Lusaka. The school is being constructed to ensure adequate educational facilities in line with government programme.

2.3.2 The Scope of works at the Mpongwe (B) Basic School include but are not limited to the following:

- Construction of 4 Nos. 1x3 new Classroom Blocks; 1 No. 1x2 science Laboratories; 1 No 1x2 Home Economics Classrooms; 2 Nos. Toilet Blocks; and, 10 Nos. Staff Houses. Upgrading works from gravel class II to bituminous class I category C works with concrete asphalt wearing course and drainage works.
- Sewerage works including septic tanks and soakaways;
- Storm water drainage works, and,
- Construction of gravel road infrastructure.

2.4 Approach to Pilot Study

2.4.1 The approach taken by the Team generally involved the following steps:

- (i) Hold an initial meeting with the procuring entity to introduce the objectives of the study and submit the list of information (MPI) the entity was expected to disclose;
- (ii) Agree and identify the contact person on behalf of the procuring entity to provide the MPI and the timeframe for providing the information;
- (iii) Receive and analyse the initial information disclosed;
- (iv) Seek clarifications and further information where this was deemed necessary; and
- (v) Undertake a site visit to get an appreciation of the project and obtain clarifications, confirmations etc from the contractor and/or supervisor on issues not clear to the Team.

2.4.2 The findings were then compiled into this report.

3 ACTIVITIES UNDERTAKEN ON THE PROJECT

3.1 Meetings with Stakeholders

- 3.1.1 The Assurance Team had a meeting with representatives of the Ministry of Education at which the Assurance Team explained the objective of the study and the information that needed to be disclosed on the five projects that had been selected.
- 3.1.2 It was agreed during the meeting that the Infrastructure Department would provide the Team with material project information and documentation in whatever form available. A template of the material project information which needed to be disclosed was given to the Department.
- 3.1.3 A follow-up meeting on the construction of high schools (the five selected projects) were held with the Procurement Unit in order to obtain a better understanding of the procedures followed by the Ministry of Education in the development and execution of projects.
- 3.1.4 After the initial information had been released, the Team undertook a site visit in order to have an appreciation of the project and also discuss issues which were not clear in the documents and/or information disclosed.
- 3.1.5 The material project information disclosed is given at Appendix I. The Documents which were disclosed to the Assurance Team are listed in Appendix II.

3.2 Collection and Analysis of Data

- 3.2.1 The Team analysed the information disclosed and held further meetings with other staff from MoE-DEBS to obtain missing information and get clarifications on certain issues and processes, determine the accuracy and completeness of the information and appreciate how the project was being managed.
- 3.2.2 The material project information which the MoE was expected to disclose is given in Appendix I. The list of documents disclosed is presented in Appendix II.
- 3.2.3 Obtaining the necessary documents proved to be more difficult than initially envisaged. This was largely due to the fact that the documents were lying in various places and offices.

3.3 Site Visit

- 3.3.1 After the initial set of information was released by MoE, the Team undertook a site visit to talk to the contractor and supervising consultant and get an appreciation of the project.
- 3.3.2 The team also used the site visit to collect additional/missing information and carrying out a qualitative visual inspection of the works.

4 DATA VERIFICATION

4.1 Project Identification and Budgeting

The project was identified and budgeted for under the MoE Work plan for 2007

4.1.1 The Ministry of Education has developed a strategy, The National Implementation Framework, 2008 to 2010 (NIF), whose objective is to operationalised the Fifth National development Plan (FNDP) with particular reference to the Government Policy of Education For All (EFA).

4.1.2 The underlying principles of EFA objectives in Zambia are:

- (i) *Access*: which emphasised Government's commitment to universal provision of opportunities for a defined minimum level of education;
- (ii) *Equity*: which emphasised the need to ensure that the distribution and utilisation of opportunities in education would be fairly targeted in order to reach the disadvantaged groups in society;
- (iii) *Learning achievement*: which emphasised the need to focus on well-defined learning achievements as a major outcome of the education process? This principle is linked with *relevance*, *effectiveness* and *efficiency* which, together, help to define quality in the education process.

4.1.3 One of the NIF Strategic Priorities, Strategic Priority 1, is Access Considerations. Government proposes to achieve the EFA targets in terms of increased enrollment through the provision of additional facilities/schools and the expansion of existing ones. This entails an effective infrastructure development that facilitates, in an equitable manner, the construction, rehabilitation and maintenance of the education sector's physical assets.

4.1.4 The NIF strategic priorities form the four pillars of access, quality, efficiency and quality and each education sub-sector has clear objectives and priorities during the FNDP. In the high school education sub-sector, the provision of more classrooms and the training of teachers are the key investment areas.

4.1.5 Mpongwe is one of the areas which qualified for the construction of a Basic school.

4.1.6 The budget for the construction of Mpongwe (B) Basic School was K7.3billion.

4.2 Procurement Procedures

4.2.1 General Guidelines

- 4.2.1.1 Procurement undertaken by the MoE is governed by the Public Procurement Act, 2008 or its predecessor, the Zambia National Tender Board Act. However, the procurement of consultants and contractors for the construction of the whole school project was governed by the Funding Guidelines of the funding agency.
- 4.2.1.2 The approved Annual Procurement Plan shows the procurement method and budget for all projects to be undertaken by the Ministry. In accordance with the Public Procurement Act, 2008, the procurement method is generally determined by the estimated value of the procurement.

4.2.2 Procurement of Consulting Services

- 4.2.2.1 The Ministry of Education, through the School Infrastructure Section, has the capacity to undertake the design and supervision of most of its projects as it has architects, engineers, quantity surveyors etc.
- 4.2.2.2 The decision whether or not to undertake a project internally is largely determined by work schedules of the relevant specialists.
- 4.2.2.3 The initial design of the high schools was however undertaken by an outside consultant. This is the design which has been adopted for all high schools.
- 4.2.2.4 The supervision of the project is undertaken by SIS.

4.2.3 Procurement of Works Contractors

- 4.2.3.1 The procurement of works contractors is undertaken in accordance with the Public procurement Act, 2008. The method of procurement is based on the estimated cost of a project. The estimated cost for the construction of Mpongwe (B) Basic School dictated that procurement of the contractor should be by open bidding (National Competitive Bidding).

4.3 Procurement Process

4.3.1 Design and Supervision

4.3.1.1 The Ministry has adopted a standard design for all the high schools to be constructed in the country.

4.3.1.2 The invitation for expressions of interest for the Consultancy Services for Architectural, Engineering, Quantity surveying, Construction Management and Supervision for the Construction of High and Basic Schools on the Copperbelt Province was invited in early 2002.

4.3.1.3 Six firms were shortlisted and invited to submit detailed proposals. The firms requested to submit technical and financial proposals were;

- (i) Rinceau Design Consultants, Lusaka, Zambia
- (ii) Ndilila Associates, Architects, Lusaka, Zambia
- (iii) Studio Arts Inc., Harare, Zimbabwe
- (iv) Vengesayi Architects, Harare, Zimbabwe
- (v) Plancenter Limited, Helsinki, Finland
- (vi) Arab Consulting Engineers, Giza, Egypt

4.3.1.4 All the six shortlisted firms submitted detailed proposals and the offers were evaluated in accordance with the Request for Proposals.

4.3.1.5 The contract was awarded to a consortium of Ndilila Associates (Architects), Interconsult (Z) Limited and Mwila Kafula (Quantity Surveyors).

4.3.1.6 The Ministry through the Schools Infrastructure Section has adopted the design by Ndilila Associates as the standard design for high schools in Zambia.

4.3.1.7 The Contract for consulting services (design) for the completion of the Mpongwe (B) Basic School was signed in August 2004 together with those for the rest of Zambia. No specific consultancy figures were disclosed.

4.3.1.8 The consultancy services were funded by the International Development Association of the World Bank.

4.3.1.9 Except for the dates for the invitation for the expressions of interest and taking into consideration that the contract was meant for another project, we are satisfied that the Ministry has given adequate and satisfactory information on the procurement of Ndilila and Associates for the design of Mpongwe (B) Basic School in Mpongwe.

4.3.2 Works

- 4.3.2.1 The tender for the construction of Mpongwe (B) Basic School was undertaken using the open bidding method in accordance with the Public Procurement Act, 2008.
- 4.3.2.2 Hua Jiang Investments was the lowest evaluated bidder and awarded the contract at the contract price of ZMK7,337,248,315.61.
- 4.3.2.3 The fixed price contract signed on 14th May, 2009 between the Ministry of Education and Hua Jiang Investments is based on the standard Form of Tender which is commonly used in the construction industry and approved by the Zambia Institute of Architects.
- 4.3.2.4 We are satisfied that the documents on the appointment of Hua Jiang Investments as contractor for the Construction of the Mpongwe (B) Basic School have been disclosed to describe fully and accurately the appointment.

4.4 Project Execution

4.4.1 Design and Supervision

- 4.4.1.1 The Design of the school was done by the Schools Infrastructure Section (SIS) based on the Ndilila and Associates design.
- 4.4.1.2 The works are being supervised by SIS in accordance with the procedures set out by SIS which have since been updated in the Infrastructure Operational Development Plan 2010. The Section has many years of experience in the supervision of of the construction of school infrastructure.

5 Data ANALYSIS

5.1 Project Supervision

- 5.1.1 The Schools Infrastructure Section has in place procedures to ensure that project costs, quality and time frame are kept within contract terms and conditions.
- 5.1.2 There are three levels of supervision for the construction of the school, namely, Ministry of Education Headquarters staff, Regional Engineer based in Ndola the provincial Headquarters and the District Buildings Officer. However, scope and cost changes can only be authorised by Headquarters staff. The District Buildings Officer can only report any poor performance or omissions to the Resident Engineer.
- 5.1.3 Site meetings are held monthly to monitor project progress and resolve any issues which have the potential to negatively affect the project.
- 5.1.4 There have been no significant changes to the contract price, programme and scope of work.

5.2 Works Contract

- 5.2.1 The DEBS at Mpongwe indicated that instructions take longer than expected because the projects are supervised from Ndola, and at times from Lusaka and the Buildings Officer does not play any major role in the procurement process and execution.
- 5.2.2 We noted that the Ministry did not undertake a pre-qualification of contractors to ensure that only companies with the necessary qualifications and experience were shortlisted and invited to submit bids.
- 5.2.3 The fixed price contract signed with the contractor is based on the standard Form of Tender as approved by the Zambia Institute of Architects and in use for most if not all construction projects in Zambia. The fixed price contract provides an incentive to work more efficiently as any savings realized will accrue to the contractor.
- 5.2.4 There have been no changes to the contract so far.

5.2.5 During the site visit of the 24th June, 2010 the works were assessed to be of good quality, based on visual inspection, the project was on schedule but payment was delayed.

5.3 Issues of Concern

5.3.1 The only issue of concern on the project is delayed payments, which could lead to delays in progress and fluctuations in price if contractors resort to borrowing to finance the works.

APPENDIX I: MATERIAL PROJECT INFORMATION

B2 Project Name: Construction of Mpongwe (B) Basic School

1	<i>Project Identification</i>	
	Project Specification	Construction of Mpongwe (B) Basic School.
	Purpose	To provide basic education for school going children and eligible adults
	Location	Mpongwe District on the Copperbelt Province
	Intended Beneficiaries	School going children and the general public.
	Specification	N/A
	Feasibility Study	N/A
2	<i>Funding</i>	
	Financing Agreement	Sector Pool
	Budget	Not available
	Quantity Surveyors Estimate	Not Available
3	<i>Tender Process for the Contract for Project Design</i>	
	Tender procedure	Information not available
	Number expressing interest	Information not available
	Number shortlisted	Information not available
	Number submitting tender	Information not available
4	<i>Tender Process for the Contract for Project Supervision</i>	
	Tender procedure	Not applicable
	Number expressing interest	Not applicable
	Number shortlisted	Not applicable
	Number submitting tender	Not applicable

5	<i>Tender Process for the Main Contract of Works</i>	
	Tender procedure	Open Bidding (National Competitive Bidding)
	Number expressing interest	6
	Number shortlisted	N/A
	Number submitting tender	6
	List of tenderers	Able construction Solartec Ltd Hua Jiang China Jiangxi Matty Investments Africa Brothers
	Tender evaluation report	Not available
6	<i>Details of the Contract Award: Project Design</i>	
	Name of main consultant	N/A
	Contract price	N/A
	Contract scope of work	N/A
	Contract programme	N/A
7	<i>Details of the Contract Award: Project Supervision</i>	
	Name of main consultant	In-house SIS
	Contract price	N/A
	Contract scope of work	N/A
	Contract programme	N/A
8	<i>Details of Contract Award: Main Contract for Works</i>	
	Name of main contractor	Hua Jiang Investments
	Contract price	ZMK7,337,248,315.61

	Contract scope of work	<p>Construction of 4 Nos. 1x3 new Classroom Blocks; 1 No. 1x2 science Laboratories; 1 No 1x2 Home Economics Classrooms; 2 Nos. Toilet Blocks; and, 10 Nos. Staff Houses. Upgrading works from gravel class II to bituminous class I category C works with concrete asphalt wearing course and drainage works.</p> <p>Sewerage works including septic tanks and soakaways;</p> <p>Storm water drainage works, and,</p> <p>Construction of gravel road infrastructure.</p>
	Contract programme	18 calendar months from 14 May 2009 to 14 November 2010
9	<i>Execution of the Contract: Project Supervision</i>	
	Significant Changes to Contract Price, Programme, Scope with Reasons	None
10	<i>Execution of Contract: Main Contract for Works</i>	
	Individual changes to Contract which affect the price and reason for those changes	None
	Individual changes to the contract which affect the programme and reasons for those changes	None
	Details of any re-award of main contract	<ul style="list-style-type: none"> • N/A
11	<i>Post Contract Completion Details: Main Contract for Works</i>	
	Actual Contract Price	On-going works.
	Total Payments made	On-going works.
	Actual contract scope of work	On-going works.
	Actual contract programme	On-going works.
	Project Evaluation Reports (on-going and on completion)	On-going works.

APPENDIX II: DOCUMENTS DISCLOSED

S/N	Description	Date Released	Comments
1	Tender Document		
2	Tender Opening Report		
3	Evaluation Report		
4	Invitation	Opening 19-10-07 Closing 16-11-07	
5	Advertisement		

APPENDIXIII: SCHEDULE OF CHANGES

APPENDIX IV: PHOTO GALLERY



Plate 1 Teachers' housing unit



Plate 2 Soak away under construction



Plate 3 Science lab and classroom



Plate 4 Home Economics Block