



**MINISTRY OF EDUCATION
STATE DEPARTMENT OF BASIC EDUCATION**

KENYA PRIMARY EDUCATION DEVELOPMENT (PRIEDE) PROJECT

TITLE:	CONSULTANCY FOR CARRYING OUT A MIDLINE STUDY ON THE EARLY GRADE MATHEMATICS COMPETENCY LEVELS AMONG CLASS 2 PUPILS IN KENYA.
CONTRACT NO:	MOEST/GPE/CQS/XX /2017-2018
PROCUREMENT METHOD:	SELECTION BASED ON CONSULTANTS' QUALIFICATIONS (CQS)

TERMS OF REFERENCE

A. Background

1. The Ministry of Education, Science and Technology (MoEST), now Ministry of Education (MoE) received a grant from the Global Partnership for Education (GPE) to support development of primary education sub-sector in Kenya under the supervision of the World Bank. The four-year project aims to provide specific interventions in key areas of the sub-sector and has four (04) components as described below:

- I. ***Component 1: Improving Early Grade Mathematics Competencies***

This component supports the scaling up, across Kenya, of the Early Grade Mathematics (EGM) Methodology piloted under the Primary Mathematics and Reading (PRIMR) Initiative with the support of USAID and DFID. The focus is all public primary schools across the country. These schools adopted the comprehensive EGM methodology and received the requisite teaching / learning materials as well as training for their Grades 1 and 2 teachers and other concerned personnel.

- II. ***Component 2: Strengthening School Management and Accountability***

This component constitutes a pilot project to improve school performance through strengthened school management and accountability for results in the delivery of primary education. The pilot targets low performing public schools (i.e. those schools whose Kenya Certificate of Primary Education (KCPE) scores in 2012 and 2013 were below the average of 243), in each county and ASAL counties in particular. The interventions under this component include School Specific Analysis of KCPE results; provision of 2014 KCPE General Feedback reports; Appraisal of Teacher Competency; support and capacity building for School Improvement Planning with improved stakeholder participation and enhanced financing to schools; strengthening school audit and monitoring of pilot results.

III. ***Component 3: Capacity Building for Evidence-Based Policy Development at National Level***

This includes strengthening the data/ Education Management Information System (EMIS) in primary education to make data more available, reliable and integrated; enhancing the system for monitoring learner achievement and enhancing the capacity to develop policies on equity, efficiency and quality at the national level.

IV. ***Component 4: Project Coordination, Communication and Monitoring and Evaluation***

This covers key project management functions including coordination, communication and result monitoring and evaluation.

2. Under Component 1, Early Grade Mathematics Competencies, the PRIEDE Project Development Objective focuses on improving the foundations of learning by enhancing Early Grade Mathematics Competencies – complementing efforts of the Government of Kenya through the **Tusome** project.
3. To this end, EGMA baseline study was carried out in 2016 to establish Class 2 pupils' competency levels in the four basic Mathematical operations, more significantly subtraction. The over-riding objective of the Baseline study was to establish the Class 2 pupils' entry behaviour before the EGM interventions. The study revealed that a considerable percentage of Class 2 pupils had not attained the desired 50% benchmark in all the Mathematical operations. It is therefore necessary to undertake a Midline Study to establish the impact of the EGM interventions on pupil attainment of the basic competency levels in Mathematics.
4. The Ministry of Education is therefore seeking the services of a reputable firm to undertake the aforementioned Midline Study to determine the achievement in EGM competency levels among Class 2 pupils.

B. Objectives of the Study

5. The objectives of the EGMA Midline Study are to: determine the Early Grade Mathematics (EGM) competencies among Class 2 pupils disaggregated by gender, region, rural-urban and public and private schools; assess the current pedagogy for teaching Mathematics in early primary grades; assess current teaching-learning practices e.g. use of Mathematics syllabi, preparation of lesson plans, lesson delivery, classroom, homework and assessment practices; assess teachers' competencies to teach Mathematics in early grades; assess the current strategies for building Mathematics competencies in early grades; identify issues and areas for improvement and suggest necessary interventions required at various levels.

C. Scope and Tasks of the Assignment:

6. The scope of the study is the entire country. The study will be carried out in 300 regular public and private schools randomly sampled and 25 purposively sampled Special Needs Education (SNE) schools across the 47 counties. The study will be carried out during the third term of 2017 and the final report shall be submitted **not later than** twenty four (24) weeks after the signing of the Contract. The study will use both quantitative and qualitative methods. The research instruments will include: Pupil Mathematics Competency Test; Classroom Observation Schedule; School Observation Schedule; Mathematics Teacher Questionnaire; Mathematics Teacher for

SNE schools Questionnaire; Senior Teacher Questionnaire; Head Teacher Questionnaire; Primary Teacher Training College Mathematics Lecturer Questionnaire; Curriculum Support Officer Questionnaire; and Quality Assurance and Standards Officer Questionnaire.

D. Roles and Responsibilities

7. The Consultant will be expected to:
 - a. Conduct a desk review of similar assessments carried out in Kenya (e.g. EGMA Baseline, PRIMR, NASMLA, SACMEQ and Uwezo house hold surveys) and reports from elsewhere on learner achievement in Early Grade numeracy, focusing on identifying similarities and gaps, for instance in methodology, research instruments and study findings.
 - b. Prepare a detailed Inception report which will include the following:
 - i. Objectives of the study;
 - ii. Research questions;
 - iii. Research methodology, highlighting the research instruments, data collection procedure and data entry and analysis;
 - iv. A detailed work plan on how the research will be carried out. It should show the team composition detailing their roles and responsibilities;
 - v. Proposed report structure and format.
 - c. Review the following research instruments provided by KNEC:
 - i. Class 2 Pupils' Mathematics Achievement Test;
 - ii. Classroom Observation Schedule/ Guide;
 - iii. Mathematics Teacher Questionnaire;
 - iv. Head teacher Questionnaire;
 - v. Senior Teacher Questionnaire;
 - vi. SNE Mathematics teacher Questionnaire;
 - vii. PTTC Mathematics Lecturers' Questionnaire;
 - viii. Curriculum Support Officers' Questionnaire;
 - ix. Quality Assurance and Standards Officers' questionnaire;
 - x. School observation schedule;
 - xi. Pupil Name Form;
 - xii. Data collectors' Manual;
 - xiii. Random tables for school-level sampling of 25 pupils.
 - d. Pilot the research instruments;
 - e. Collect and process data through:
 - i. Recruiting and training Data Collectors and Regional Coordinators;
 - ii. Conducting the data collection in the sampled schools;
 - iii. Scoring the Pupils' Achievement Test;
 - iv. Conducting Data Entry and Cleaning.
 - f. Analyze the data;
 - g. Prepare and present reports which include:
 - i. Draft EGMA Midline Report;
 - ii. Comprehensive Final EGMA Midline Report;
 - iii. Executive Summary of the EGMA Midline Report;
 - iv. Policy Brief and a PowerPoint presentation of the final EGMA Midline Report;
 - h. Institute Internal Quality Assurance mechanisms (level-one monitoring).

8. The Kenya National Examinations Council (KNEC), will, through National Assessment Centre (NAC):
 - a. Supervise all the activities undertaken by the consultant;
 - b. Provide, at no cost, the following inputs and reports:
 - i. A list of sampled primary schools, both private and public, and SNE schools per county;
 - ii. Pupils' Achievement Test;
 - iii. PRIMR, EGMA Baseline, NASMLA, SACMEQ and Uwezo house hold reports;
 - c. Convene NASMLA Technical Committee meetings as and when required to promptly review and accept upon meeting requisite requirements:
 - i. The inception report, work-plan and research instruments;
 - ii. Data collection report, cleaned data sets and dummy tables;
 - iii. Draft and final EGMA Midline reports.
 - d. In conjunction with the PCU, facilitate data collection by issuing letters/communications to schools and other key informants;
 - e. Independently monitor data collection, entry, analysis and report writing;
 - f. Convene, through the Project Coordination Unit, stakeholder and Senior Management meetings to receive and validate EGMA Midline final report.
9. The PCU will facilitate the process and ensure that the consultant will deliver according to the TOR.

E. Key Deliverables and Timelines

10. The Consultant will be required to complete his assignment in sixteen (16) weeks. The key deliverables and indicative timelines for each phase of the assignment are provided in the table 1:

S.No	Key Deliverable	Timeline
1	Draft inception report, with detailed work plan and reviewed research instruments	Within one (01) week from the date of award of the Contract
2	Final inception report and Research instruments	Within one (01) week after approval of the Draft Inception Report by KNEC
3	Data collection report on pilot study	Within two (02) weeks after approval of the Final Inception Report by KNEC
4	Final Report on Pilot Study data (the report should adopt the structure of a Research report)	Within two (02) weeks after Pilot study data collection
5	Main study Data collection report	Within four (04) weeks after submission of the Pilot study report
6	Clean data sets and dummy tables	Within three (03) weeks after submission of data collection report
7	Draft EGMA Midline Report	Within four (04) weeks after submission of clean data sets and dummy tables
8	Final EGMA Midline Report, Executive Summary, Policy Brief and PowerPoint	Within two (2) weeks after approval of the Draft report by KNEC

NB: In all cases the acceptable completion period is 24 weeks after the signing of the Contract.

F. Qualification & Eligibility Requirement for the Consultant:

11. The interested consultant shall be a tax registered national management consultancy firm or officially registered not-for-profit organization (e.g. research institute, academic institution) incorporated for at least five (5) years offering similar services and have completed at least five (5) similar National surveys of this scope and complexity and in comparable organizations. The Consultant should possess good knowledge of the concepts, principles and approaches required for the assignment.
12. The consultant should provide details (documentary evidence e.g. contract award or reference letter from the clients, stating scope of services and deliverables) of all such projects for the last 5 years or more during which they were completed.
13. In case of a joint venture, the details of such assignments will be provided separately as primary or associated consultant. The Consultant shall have an adequately staffed and equipped office.
14. The consultant shall have sufficient professionals with at least a Bachelor's Degree and experience in research. The team shall comprise:
 - i. A Team Leader who must be a holder of a Ph.D in Education (Measurement & Evaluation) or Research & Evaluation or a Social Sciences with at least five (5) years' cumulative experience in carrying out National level surveys in education;
 - ii. An Education Expert who must have at least a Masters degree in Education with five (05) years' progressive experience, at least three (03) of which must be in National level education surveys /educational assessment;
 - iii. A Statistician with a minimum of Bachelors degree in Statistics or Mathematics or Economics with proficiency in the relevant statistical packages. He/ she must have at least five (05) years' experience in data analysis;
 - iv. A Logistics Coordinator with at least a Bachelors degree in Social Sciences, or a related field and three (3) years' cumulative experience in logistics or operational management.
15. The consultant will be expected to demonstrate the capacity to recruit adequate data collectors who hold a minimum of Bachelor of Education.
16. Following will be the short listing criteria:

<i>Overall Relevant Experience:</i>	<i>20</i>
<i>Number of Similar and Comparable Assignments:</i>	<i>40</i>
<i>Logistical & staff capacity:</i>	<i>15</i>
<i>Professional Capacity:</i>	<i>25</i>
Total	100
17. **Selection Process:** The consultant will be selected in accordance with the criteria laid down in "Selection Based on Consultants Qualification" (CQS) method set out in the World Bank's Consultant Guidelines dated January, 2011 and revised July, 2014.
18. Once the Contract is signed, the consultant will neither change the team nor decrease the size of the team nor replace any member(s) without approval from KNEC. In all such cases for approval, a replacement of a Key Expert shall have equal or better qualifications and experience than those of the originally proposed Key Expert.

19. Other terms on replacement of Experts or Sub-consultants are stated as follows:
- i. If the Client finds that any of the Experts or Sub-consultants has committed serious misconduct or has been charged with having committed a criminal action, or shall the Client determine that the Consultant's Expert or Sub-consultant have engaged in corrupt, fraudulent, collusive, coercive or obstructive practice while performing the Services, the Consultant shall, at the Client's written request, provide a replacement;
 - ii. In the event that any of the Key Experts, Non-Key Experts or Sub-consultants is found by the Client to be incompetent or incapable of discharging the assigned duties, the Client, specifying the grounds thereof, may request the Consultant to provide a replacement;
 - iii. Any replacement of Experts or Sub-consultants shall possess better qualifications and experience than the replaced consultant, and shall be acceptable to the Client;
 - iv. Except as the Client may otherwise agree, (a) the Consultant shall bear all additional travel and other costs arising out of or incidental to any removal and/or replacement, and (b) the remuneration to be paid for any of the Experts provided as a replacement shall not exceed the remuneration which would have been payable to the Experts replaced or removed.

G. Copyright and confidentiality

20. All study material and data from the study will be the sole property of the Ministry of Education. No information on the study and information collected for the study will be shared with anyone without the written permission of KNEC/PCU. The Consultant shall carry out the above assignment in accordance with the highest standard of ethical competence, integrity and professionalism and having due regard to the nature and purpose of the assignment. The Consultant will at all times and for all purposes, regard as strictly confidential all knowledge and information not within public domain which may be acquired in the course of carrying out this assignment and shall not be directly or indirectly disclosed to any person whatsoever, except with the written permission of MoE / KNEC.

H. Proposed Cost

21. The table 2 shall guide in determining the cost for carrying out the survey:-

Descriptions		Quantity	Person days	Rate (USD)	Total (USD)
<i>Personnel</i>					
Team Leader	Fees	1	45		
	Local travel	1	20		
Education Expert	Fees	1	50		
	Local travel	1	20		
Statistician	Fees	1	50		
	Local travel	1	20		
Logistics Coordinator	Fees	1	30		
	Local travel	1	20		
Regional Coordinators	Fees	34	340		
	Local travel	34	340		

Data Collectors	Fees (pilot)	32	96		
	Local travel (pilot)	32	96		
	Fees (main study)	650	3,250		
	Local travel (main study)	650	3,250		
Data Entry Clerks & Scorers	Fees	40	600		
	Travel & accommodation	40	680		
<i>Other Expenses</i>					
Training of Data Collectors		684	1,368		
Printing of Instruments		13	13		
Miscellaneous		1	1		
Total					

- NB:**
- i) Two (02) Data Collectors will be engaged in each of the sampled schools to enhance the reliability of the data collected;
 - ii) There will be seventeen (17) regions, each with two (02) coordinators;
 - ii) The firm shall provide a written justification for any modification to the proposed Personnel, Proposed Quantities and Proposed Person Days.

I. Proposed Payment Schedule

- i. **1st Payment:** Advance payment of **10%** of the contract price upon signing of contract and submission of a Proforma Invoice and Advance Payment Bank Guarantee of the same amount; and an acceptable inception report with a detailed work plan;
- ii. **2nd Payment: 30%** of the Contract Price upon submission the Main study Data Collection Report and acceptable Clean Data Sets and Dummy Tables;
- iii. **Final Payment: 60%** of the Contract Price upon submission and presentation of an acceptable Final EGMA Midline report.