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Maldives Learning Advancement and Measurement Project (LAMP: P172631)

Ministry of Education

Republic of Maldives

TERMS OF REFERENCE

CONSULTANT FOR DATA ANALYSIS AND REPORT WRITING OF NALO-2021

Background

The Government of Maldives (GoM) has an Education Sector Plan (ESP) endorsed by the Local Education Group (LEG) under implementation. This is the central step required for financial assistance from the GPE. The ESP has four main goals. The first goal is to improve learning for all through equitable access to quality education. The main results of the GoM seeks to achieve under this goal are to ensure that all children from preschool through grade 12 are enrolled in school, learning gaps across atolls are reduced, and overall learning outcomes are improved. The second goal is to provide youth and adults with the necessary skills for employment, decent work and entrepreneurship. The third goal is to ensure equitable access to lifelong learning and a quality higher education for all. The fourth and final goal is to strengthen the system for efficiency to deliver high quality education. The Maldives Learning Advancement and Measurement Project (LAMP) will support the first goal by promoting strategic initiatives to improve learning outcomes in foundation and primary education, with a special focus on the atolls where learning levels are lowest.

Components of the LAMP

The LAMP is organised into three components.

Component one: Strengthening Curriculum Implementation: is designed to strengthen curriculum implementation and improve learning outcomes in key subjects, English, mathematics and Dhivehi at the Foundation and Primary Education stages. To ensure equitable access to learning, this component is also designed to provide support for children with SEN and students at risk.

Component two: Improving Teacher Education and Development: is designed to improve teacher quality and performance; with initiatives aimed at improving both pre-service teacher education and continuing professional development of teachers. The Project will help the GoM to develop SBPD to continuously improve teacher motivation, pedagogical skills, competencies and performance. In addition, the Project will help enhance the quality of pre-service teacher education programs offered by the MNU, IUM, and non-state HEIs.

Component three: Advancing the Measurement of Student Learning and School Performance: is designed to advance the measurement of student learning and school performance; with specific initiatives aimed at modernising the system for learning assessment and developing the school QA system.



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Background of the assignment

The LAMP is supporting the MoE to develop the capacity of the country to plan and execute the NALO (National Assessments of Learning Outcomes) at the end of Key Stages 1 and 2 (grades 4 and 7) for the key subjects: Dhivehi Language, English language, and mathematics; the results and findings of which will be utilised for the development of educational policies and programmes. In addition, together with the NALO-2021, some questions from an international assessment are included in the paper for piloting. The NALO-2021 is currently ongoing; for which the QAD requires assistance for the data analysis and the compilation of the report. Thus, the MoE is looking to hire a Consultant for the work.

Objective and scope of services

The objectives of this assignment is to: (i) carry out the data analysis of the NALO-2021, (ii) prepare and submit a report of findings of the analysis of the NALO of the Dhivehi language, English language, and mathematics in grades 4 and 7, (iii) carry out the data analysis of the International Assessment questions of the English language and mathematics in grade 4 separately from the NALO-2021 data; and (iv) prepare and submit a report of findings of the analysis of the International Assessment questions of the English language and mathematics in grades 4 and 7 separately from the NALO-2021 report. The Consultant will be expected to:

- Clean the data of both the NALO-2021 and the International Assessment questions, ready for analysis;
- Analyse the data for the NALO-2021 using statistics such as mean, median, mode, standard deviation, variance, decile and quintile analysis, and descriptive statistics such as frequencies, cross-tabulations, and correlation analysis;
- Prepare and submit a draft report of the findings and recommendations based on the above statistical analysis of the NALO-2021;
- Prepare an executive summary of the findings at individual school level. The school level, skill-wise data analysis should include 2-3 sheets for each grade of each school;
- Analyse the data for the International Assessment questions separately from the NALO-2021, using statistics such as mean, median, mode, standard deviation, variance, decile and quintile analysis, and descriptive statistics such as frequencies, cross-tabulations, and correlation analysis;
- Compare Maldivian score for each item with the worldwide score and the regional score for the respective item where information is available to enable this comparison;
- Complete and submit the final report of the NALO-2021 including the findings of the International Assessment questions, to the QAD, as given in Annex 1; and
- Present or support QAD to present the findings of the NALO-2021 and the International Assessment questions to the MoE as required, and propose the next steps for policy level or strategic changes.



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Deliverables, timeline, and payment schedule

Timeline	Tasks	Deliverables	Payment %
	Signed Contract.		10%
1 person-week	Clean the data of both the NALO-2021 and the International Assessment questions, ready for analysis.	Data of both the NALO-2021 and the International Assessment questions cleaned and ready for analysis.	
3 person-weeks	Analyse the data for the NALO-2021 using statistics such as mean, median, mode, standard deviation, variance, decile and quintile analysis, and descriptive statistics such as frequencies, cross-tabulations, and correlation analysis. Analysis of correlations for factors influencing students' achievements by using factors identified in questionnaires.	Data for the NALO-2021 analysed using statistics such as mean, median, mode, standard deviation, variance, decile and quintile analysis, and descriptive statistics such as frequencies, cross-tabulations, and correlation analysis.	
2 person-weeks	Prepare and submit a draft report of the findings and recommendations based on the above statistical analysis of the NALO-2021.	Prepare and submit a draft report of the findings and recommendations based on the above statistical analysis of the NALO-2021.	
1 person-week	Comments and approval of the draft report by the QAD.	Draft report approved by the QAD.	30%
2 person-weeks	Prepare an executive summary of the findings at individual school level. The school level, skill-wise data	Prepare an executive summary of the findings at individual school level. The school level, skill-wise data	



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	analysis should include 2-3 sheets for each grade of each school.	analysis should include 2-3 sheets for each grade of each school.	
2 person-weeks	Analyse the data for the International Assessment questions separately from the NALO-2021, using statistics such as mean, median, mode, standard deviation, variance, decile and quintile analysis, and descriptive statistics such as frequencies, cross-tabulations, and correlation analysis. Compare Maldivian score for each item with the worldwide score and the regional score for the respective item where information is available to enable this comparison.	Data for the International Assessment questions analysed separately from the NALO-2021, using statistics such as mean, median, mode, standard deviation, variance, decile and quintile analysis, and descriptive statistics such as frequencies, cross-tabulations, and correlation analysis. Maldivian score compared for each item with the worldwide score and the regional score.	
1 person-week	Complete and submit the final report of the NALO-2021 including the findings of the International Assessment questions, to the QAD, as given in Annex 1.	The report of the NALO-2021 including the findings of the International Assessment questions, as given in Annex 1 completed and submitted to the QAD.	
1 person-week	Comments and approval of the final report by the QAD.	Final report approved by the QAD.	50%
1 person-week	Present or support the QAD to present the findings of the NALO-2021 and the International Assessment questions to the MoE as required, and propose the next steps for policy level or strategic changes.	The findings of the NALO-2021 and the International Assessment questions presented or supported the QAD to present to the MoE as required, and the next steps for policy level or strategic changes proposed.	



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1 person week	Comments and approval of the findings of the NALO-2021 and the International Assessment and the comments and approval of the proposals of the next steps for policy level or strategic change by the MoE SMT/EXCO.	The findings of the NALO-2021 and the International Assessment and the proposals of the next steps for policy level or strategic change approved by the MoE SMT/EXCO.	10%
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Data to be provided from the QAD to the Consultant

The Consultant will be provided data sheets of students' answers for each assessment item, in Excel sheets.

Procedure for review of deliverables

The Assessment Team from the QAD will check the deliverables and Assessment Team lead will provide feedback to the Consultant for the deliverables. The deliverables will be deemed as completed, once approved by the Assessment Team lead, in writing.

Required qualifications and experience

In order to successfully carry out the tasks listed above, the Consultant is required to have the following qualifications and experience:

- At least a Master's Degree in Statistics, Education, Assessment and Evaluation, or in a related field, and
- Minimum 2 years of experience in statistical analysis, using software such as STATA, SPSS, SAS, ConQuest or other statistical, psychometric, or econometric software.

Professional competencies

In addition to the required qualifications and experience, the Consultant must have the following professional competencies:

- Prior experience in analysis and report writing preferably for the education sector,
- Strong organisation, co-ordination and teamwork skills,
- Excellent verbal and written communication skills in English, and the ability to prepare high quality reports in English,
- Proficiency in the use of MS Office, advanced statistical software, Google products, and the internet, and

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- Respect for cultural diversity and ability to work in diverse cultural settings.

Duration of the contract

The contract duration will be 3 person-months, starting from the date of signing the agreement.

Remuneration

The Consultant will be paid as per the agreement between GoM and the WB for this position, as per the payment schedule provided in the “**Deliverables, timeline, and payment schedule**”.

Working Arrangements

The Consultant will work remotely. The Consultant will be required to provide regular updates and attend meetings as and when required by the QAD.



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ANNEX 1

Report Outline

1. Executive Summary

2. Chapter 1

Introduction of the report (ex: Background, Rationale).

3. Chapter 2

Methodology (ex: sampling methodology, population, framework for the national assessment, procedures in administration of the national assessment, analysis of data).

4. Chapter 3

Patterns in achievement of grade 4, for the 3 subjects, Dhivehi language, English language, and mathematics as given below:

- Patterns of achievement at national level,
- Patterns of achievement by atoll,
- Patterns of achievement by gender,
- Report for the school level, skill-wise data analysis,
- Patterns of achievement by enrollment size,
- Patterns of achievement by competency level, and
- Patterns of achievement for International Assessment items (Include a separate analysis for this section).

5. Chapter 4

Patterns in achievement of grade 7, for the 3 subjects, Dhivehi language, English language, and mathematics as given below:

- Patterns of achievement at national level,
- Patterns of achievement by atoll,
- Patterns of achievement by gender,
- Report for the school level, skill-wise data analysis,
- Patterns of achievement by enrollment size, and
- Patterns of achievement by competency level.