



Maldives: Atoll Education Development Project (AEDP)

MINISTRY OF EDUCATION

(Procurement Ref: MV-MOE-332446-CS-INDV)

TERMS OF REFERENCE AND SCOPE OF SERVICES

Consultant to develop Fehi Madharusa Website

1. Introduction

The Maldives Atoll Education Development Project (AEDP) is organized under five components: (a) enhancing curriculum delivery; (b) continuing teacher development; (c) measuring and enhancing system performance; (d) coordination, monitoring, capacity building and technical assistance; and (e) contingent emergency response. These components and the activities under them were prepared through a process of consultation and collaboration with the Ministry of Education (MoE); the Ministry of Finance and Treasury (MoFT); the atoll education agencies; public and private employers; academics and school principals, teachers, parents and students. The components and activities are also based on the knowledge and experience gained through the implementation of the Learning Assessment and Measurement (LAMP) Global Partnership for Education (GPE) trust fund.

The Government of Maldives (GoM) is implementing the “Maldives: Atoll Education Development Project (AEDP) Project. The project is funded by the World Bank. The objective of the project is to increase access to education and enhance the quality of secondary education.

Components of AEDP

The AEDP is organized into 04 components;

1. Component One: Enhancing Curriculum Delivery and Increasing Higher Secondary Participation
2. Component 2. Continuing Teacher Development
3. Component 3: Measuring and Enhancing School and System Performance
4. Component Four: Coordination, Monitoring, Capacity Building and Technical Assistance

Component One: Enhancing Curriculum Delivery and Increasing Higher Secondary Participation

The objective of this component is to promote strategic initiatives at the country level to strengthen and develop the general education system with a special focus on secondary grades. The activities under this component will be mainly implemented by schools with policy and technical support of the Ministry of Education (mainly PPR and School Administration Section), National Institute of Education (NIE), and the Department of Inclusive Education (DoIE).

Component 2. Continuing Teacher Development

The component will assist GoM to carry out a program of continuing teacher development activities. The activities under this component will be mainly implemented by schools with the policy and technical support of the NIE.

Component 3: Measuring and Enhancing School and System Performance

The component will assist GoM to measure the performance of the school system through quality assurance activities and national assessments of learning outcomes. The activities under this component will be mainly implemented by the QAD, and by schools with the policy and technical support of the QAD.

Component Four: Coordination, Monitoring, Capacity Building and Technical Assistance

Under this component the Project will assist NIE to develop a website for the Fehi Madharusa as part of technical assistance and help strengthen capacity building of teachers relating to Environment Education.

Maldives is the lowest lying country in the world and is highly vulnerable to the impacts of climate change and other related natural hazards and natural conditions including its geographical location, geophysical characteristics, topographical and socio-economic factors. The lowest average elevation in the country is 1.5 meters above sea level while the lowest maximum elevation is 2.5 meters. Consequently, the country is highly vulnerable to the impacts of sea level rise given the average low-level elevation. Further, constant stress on coral reef due to human development, and rising temperature of both, water and air, cause imbalance on the local ecosystems.

Climate scientists anticipate global rise of the water level in the oceans (IPCC 2013) due to global warming. Maldives is expected to face increased number of extreme weather patterns, such as extensive precipitation and storms (Ministry of Environment and Energy 2016).

Impact of climate change affects vulnerable populations the most, including children and young people, who make one third of the country's population. Therefore, environmental context, in which

they live, learn and grow is of the key importance, including impacts of climate change and environmental issues.

According to a UNICEF study conducted in 2017, extreme heat affects children the most, resulting in health-related issues, such as migraines, headaches, fever, heat strokes, sunburns, and dust related allergies and eye problems. It has also been noted that extensive heat prevents children and adolescents from going outside to socialize and play, hence they prefer to stay indoors (because of shade, air conditioning or fan).

Waste management in the Maldives is one of the biggest environmental challenges. Not only it contributes to global warming (waste is considered one of the key accounts for the greenhouse gas and methane emissions) (Ackerman 2000), but also destroys environment, especially fragile marine ecosystems of coral reef. Two key industries in Maldives, fishery and tourism, heavily depend on wellness of the coral reef, therefore learning how to protect it, should be a common concern.

Another issue related to climate change in the Maldives is the quality of water available in the islands. Inadequate access to safe drinking water and safe sanitation are key concerns. Most of the households have rainwater tanks to harvest rain and use it for cooking. For drinking, many people claim to purchase mineral bottled water. There are communal water tanks in the island, however they are unmaintained. Examination of ground water quality in some islands show its contamination beyond usage, yet some use it for bathing and washing.

Protection from effects of climate change and strengthening resilience and adaptive capacity is considered a human right and is directly linked to the achievement of the Sustainable Development Goals, especially goal 13.

The National Curriculum of the Maldives recognizes the importance of instilling key competencies and values on climate change and environmental sustainability in children so that resilience and adaptive capacities are built right from primary level to upper secondary level. The national curriculum stipulated eight key competencies that all children must achieve. This is a major shift from the old curriculum. These key competencies form the common core of achievement which emphasizes achieving the knowledge, skills, values and attitudes identified within each key competency. One such key competency is “Using Sustainable Practices”.

It has been eight years since the new curriculum has been rolled out and the anticipated change is not evident in the school practices. Hence, one of the biggest unmet needs is capacitating the teachers to deliver the curriculum and bringing the pedagogical shift from teacher-centred to learner centred active learning and teaching and measuring key competencies. The embedding of key competencies in teaching learning materials and delivering them effectively need to be strengthened. Further, children need to practice what they learn in school and they need see adults reinforcing their learning through the knowledge, attitudes and practices in families and in communities. The curriculum requires a whole school approach for its implementation.

Fehi Madharusa programme is developed to enhance and facilitate innovative pedagogies and practices in the implementation of the intended Curriculum.

Description of the intervention “Fehi Madhrasa”

The Ministry of Education, National Institute of Education have planned to implement an environment education project called “Fehi Madhrasa” (Green Schools), using a whole school approach in selected 7 schools from 6 regions. The selected schools are:

1. Hdh. Atoll Education Center, Kulhudhuffushi
2. Hiriya school, Male
3. Muhuyiddheen school, Villimale
4. Mafushi School, K. Mafushi
5. Hafiz Ahmed school, Fuvahmulah
6. Nooraanee school, S. Hithaadhoo.
7. B Atoll School, B Dharavandhoo.

The 7 selected schools have carried out a pilot programme in 2021 and 2022 and the learning from the pilot program is that the teachers found difficult to adapt lessons to incorporate Environment and climate change concepts and implement whole school activities. They require rigorous training on environment education to increase their content knowledge and pedagogical aspects. They also require additional resources in which they can refer in teaching and learning and to plan whole school activities.

It is anticipated that the development of a website for Fehimadharusa would greatly enhance and facilitate in this respect in which they can get access to explicit relevant resources to curriculum and make connections to facilitate implementation in the class.

Furthermore, the website would be a great tool to share resources, success stories and a useful platform to expand the Fehimadharusa Framework to other schools as it is required to increase to 28 schools under AEDP.

Development of a website for Fehimadharusa is aligned to the component 4 as it facilitates capacity building as well as it provides technical assistance.

2. Objectives of this Assignment

The overall objective of this assignment is to develop a user friendly and mobile friendly website.

3. Scope of Services

Develop a dynamic, multilingual (Dhivehi/English) CMS website, based on the requirements provided by the Fehi Madharusa team.

4. Deliverables

	Payment %
<p>a. The consultant is expected to do a thorough analysis of the requirements for the website and provide a work plan within 15 days of contract signing.</p> <ol style="list-style-type: none"> 1. Navigation pack: design and develop navigations needed for site including multi-level mega navigation, footer navigation, 2. Should have a dynamic content management system (CMS) 3. All pages should be dynamic 4. Access to different features/pages (edit/update) based on their role / department 5. Ensure the compatibility to all modern browsers (mozilla, firefox, chrome, edge, etc) 6. Fully responsive design (Mobile response to all platforms) 7. Dual language search Function (Dhivehi / English) 8. Dual language translation features (eg;- bing translation) 9. PDF Viewer (for books flip book Style) 10. Download features in all (main pages and sub department pages) 11. Images and other content such as video customization features should be inbuilt within the system to allow standard content size 12. Ability to upload pictures as single entry or batch entry using CMS into gallery (gallery should be enhancing and attractive) 13. Social media integration (FB, Twitter, YouTube, etc) 14. Should have the ability to add information pages in future 	
<p>b. The completed website should be handed over to NIE within three months of contract signing and the remaining three months will be for fixing the bugs and training the staff to use the website</p>	
<p>c. At the time of website handover, the Consultant shall submit to NIE;</p> <ol style="list-style-type: none"> 1. clear and commented uncompiled source code; 2. SQL Schema 3. Full detailed technical documentation with class diagrams; 4. A User Guide with screenshots. 5. Train at least two staff for the new website 	
<p>d. Service provider should provide support, hosting and maintenance for the website for a period of 1 year to ensure that it's running without issues.</p>	

5. Required Qualifications and Experience of the consultant: Mandatory documents

Applicants are expected from suitably qualified satisfying the following requirement below:

1. Letter of expression of interest.
2. Consultant profile.
3. Clear approach method to implement the consultancy.
4. Curriculum vitae with supporting document.
5. Evidence of projects completed successfully.
6. The minimum qualification requirements are undergraduate degree in the field of expertise
7. The consultant should have undertaken and satisfactorily executed at least 1-2 related or similar projects within the last 5 years in designing visually appealing and navigation friendly web sites.

5.1 Interview & Presentation (Only for the shortlisted candidate).

1. Must demonstrate an ability to take a test-driven approach to delivering software by building reusable code and libraries for future use.
2. Demonstrated real-world experience in delivering consumer-grade high performance responsive web applications with emphasis on mobile first design methodology.
3. Exposure to front-end optimization, performance analysis/profiling and tuning for web applications - specifically JavaScript is highly desired.
4. Demonstrated ability writing high quality/high performance code to build innovative web applications and the skill to handle the quirks of the Internet (and browsers and devices).
5. Knowledge of software engineering practices required for working in large agile groups, such as software development life cycles, coding standards, test driven development, code reviews, Git, continuous test/build/deploy.
6. Conduct application security assessments (web, mobile, API,) using off-the-shelf or internally developed exploitation tools to execute manual testing for advanced attacks.

6. Other Competencies

- Strong implementation experience – gathering & interpreting business requirements, designing and documenting technical solutions, and managing
- Developing expert level knowledge of Google Analytics tracking and reporting capabilities
- Communicating the above knowledge to clients in terms that are easy to understand and relevant to their business needs
- Delivering and explaining Google Analytics solutions, provided by developers, to the client
- Must understand a wide variety of back-end data stores and know when, why and how to use them
- Maintaining, troubleshooting, and improving existing analytics installations

- Assisting the Conversion Rate Optimization (CRO) Team in the implementation of website optimizer tests
- Assist in the technical documentation efforts of the entire application system
- Lead demonstration and training session to end users
- Proactively identify and independently mitigate risk
- Contribute to visual design of user interfaces
- Propose, develop requirements, prototype, and execute new design and interaction concepts, collaborating with user experience, engineering, and product management
- Integrate front end code with backend application servers, and databases
- Technical leadership in UI development
- Communicate effectively with clients to assure that required services are delivered in a timely and accurate manner
- Good experience of managing stakeholders - working with development & project teams, influencing senior leaders

7. Institutional Arrangements and Reporting

The work will be carried out under the guidance and direction of the implementing agency. The consultant will work at their own workplace. However, the consultant will be required to attend all the relevant meetings arranged by the implementing agency.

8. Duration of Services and Terms of Payment

The duration of this agreement shall be for a period of 3 months. The service is for a period of 1 year. The agreement could however be extended should the need arise and the conduct of the assigned is found to be acceptable. The Consultant will be paid based on the agreed rate by both parties in writing.

9. Confidentiality, Ethics and Conflict of Interest

The selected Consultant undertakes to comply with the World Bank's rules with regard to corrupt and fraudulent practices, conflict of interest and confidentiality and the Code of Conduct specified in the Environment and Social Safeguards Frameworks of the AEDP project. The Consultant shall maintain confidentiality on all sensitive information obtained during the assignment and shall not publish wholly or in part the findings or such information, without prior written consent by the Operations and Monitoring Support Unit of AEDP.