

TERMS OF REFERENCE FOR INDIVIDUAL CONSULTANTS

Title:	Development of a Nutrition Information Module within Jamaica’s EMIS under the SDG Joint Programme: <i>Empowering Jamaica’s Future: Digital Transformation for Education</i>
Duration:	1 year (May 2026- April 2027)
Estimated Start Date:	May 2026
Duty Station:	Kingston, Jamaica
Reporting to:	Survive & Thrive Section

BACKGROUND & ORGANIZATIONAL CONTEXT

The Joint SDG Programme “Empowering Jamaica’s Future: SDG Joint Programme on Digital Transformation for Education” aims to drive digital transformation in Jamaica’s education sector by integrating efforts across education, food systems, digital connectivity, and social protection.

Led by United Nations Children’s Fund (UNICEF), United Nations Educational, Scientific and Cultural Organization (UNESCO), World Food Programme (WFP), and the Food and Agricultural Organization of the United Nations (FAO) in collaboration with the Ministry of Education, Skills, Youth and Information (MOESYI), the initiative promotes a digitally inclusive, gender-responsive education system that improves learning outcomes for children, supports teacher well-being, and ensures access to adequate nutrition. Key focus areas include digital platforms for student-centred data, improved school feeding and nutrition through digital tools, policy and teacher support, strengthened data governance and system interoperability. The programme leverages existing infrastructure such as OpenEMIS and the Learning Passport Jamaica to ensure sustainability and scalability.

Jamaica has achieved near-universal access to pre-primary and primary education, yet significant challenges persist in learning outcomes and literacy. These educational issues are compounded by a significant burden of malnutrition among children. While undernutrition remains low, according to the latest Global School-based Student Health Survey for Jamaica, the prevalence of obesity in Jamaican adolescents 13-15 years increased by 68% and doubled in adolescent boys over a 7-year period. Overweight prevalence increased by 29% mainly due to a rise among boys. Additionally, 1/4 females aged 15 and older are anaemic increasing the risk of lifelong health consequences. The root causes include food and nutrition insecurity, limited access to affordable healthy meals, and the pervasive marketing of unhealthy foods, particularly around schools. These challenges disproportionately affect the poorest households, where food insecurity is nearly seven times higher than in the wealthiest.

Under Output 2.3 of the Joint SDG Programme, a digital system will be implemented to collect and analyze real-time nutrition data at the school level. This tool will support the National School Nutrition Policy by monitoring student health, evaluating food services, ensuring compliance with nutrition standards, and assessing health promotion efforts. It will also help identify at-risk children, including gender-specific vulnerabilities, to guide decision making and targeted interventions. The ultimate aim is to reduce malnutrition in all forms and enhance educational outcomes.

PURPOSE OF ASSIGNMENT

The purpose of this assignment is to design, develop, and implement a comprehensive Nutrition Component within the Education Management Information System (EMIS) to support the goals of the SDG Joint Programme on Digital Transformation for Education. This Nutrition module will enhance the capacity of the education system to monitor and respond to students’ nutritional needs and enable systematic, real-time collection, analysis, and use of school-level nutrition data to inform evidence-based decision-making, planning, and interventions.

The Nutrition module will be developed as an integrated component of the existing EMIS architecture, ensuring full interoperability with existing education, school feeding, and student information modules. The assignment will build on existing technical infrastructure, data models, and development practices currently in use within the EMIS (such as OpenEMIS) in Jamaica. The Nutrition module will be closely linked to, and interoperable with, the School Feeding module being developed under the Joint Programme, ensuring a unified data ecosystem for monitoring student meals, nutrition status, food environments, and policy compliance.

The assignment will begin with a structured business requirements analysis, including review of the outputs from the previously conducted design workshop and other relevant documentation, consultations with stakeholders, and validation of workflows, indicators, and reporting needs. These requirements will be consolidated into a validated Business Requirements Document (BRD), which will serve as the authoritative basis for system design and development of Nutrition module.

SCOPE OF WORK

UNICEF intends to support the development of a nutrition module/component, through integration and interoperability, within the relevant Education Management Information System (such as the OpenEMIS), to support the collection of school nutrition data, including individual student nutrition status & monitoring of the implementation of the nutrition and school feeding policies.

A preliminary design workshop for the School Feeding and Nutrition modules has already been conducted with key stakeholders under the Joint Programme. While this session generated initial inputs regarding workflows, indicators, data elements, and reporting needs, these outputs must be reviewed, validated, and formalized through a structured business analysis process. The consultant will therefore review the outputs from the design workshop alongside existing technical documentation, data frameworks, and relevant policy documents to consolidate the system requirements. These requirements will be documented in a Business Requirements Document (BRD), which will guide the detailed design and development of the Nutrition module.

Stakeholder engagement and validation sessions will be conducted throughout all phases of the assignment (requirements analysis, design, development, testing, and deployment) to ensure alignment with operational needs and system usability.

Activities:

1. Inception report/workplan
 - a. Produce a technical inception report with a detailed work plan and timelines, including:
 - review and analysis of relevant documentation, including but not limited to; outputs from the previously conducted School Feeding and Nutrition Module design workshop, Joint School Feeding & Nutrition Data Framework, EMIS architecture documentation, existing OpenEMIS modules and related system documentation, relevant national policies and operational processes;
 - requirements analysis approach and plan for BRD development;
 - approach for functional and technical design specifications document, including data to be collected and indicators to be developed, based on the relevant data frameworks;
 - approach for system design and development aligned to validated requirements and processes (e.g., responsibilities and processes for collection, analysis, data reporting, and visualization);
 - approach for module operation guidelines and manuals for data use;
 - plan for support for training, testing, and piloting the module.
2. Conduct structured consultations and validation sessions with relevant stakeholders including UNICEF, MOESYI, WFP and other partners to confirm:
 - business workflows
 - user roles and responsibilities
 - data collection processes
 - reporting and analytics needs
 - interoperability requirements
3. Conduct requirements analysis and produce a Business Requirements Document that consolidates and formalizes:
 - i. functional requirements
 - ii. business processes and workflows
 - iii. data elements and indicators
 - iv. reporting requirements
 - v. user roles and permissions
 - vi. interoperability requirements
 - vii. alignment with the Joint Data Framework

Ensure the BRD is validated through stakeholder sessions and formally approved prior to proceeding with system design and development.

4. System design and module development
 - a. Based on the approved BRD, the consultant will produce detailed functional and technical design specifications and undertake the development of the Nutrition module.
 - b. Development of user-friendly manuals and interpretive material, related SOPs and user guides, maintenance guidelines, and data management framework
 - c. Work collaboratively with existing developers and system administrators, or with consultants working directly alongside them, ensuring adherence to established coding standards, architectural decisions, and deployment practices.
 - d. Ensure functional and data-level integration with the School Feeding module, including shared indicators, linked workflows, and harmonized reporting outputs as defined in the Joint School Feeding & Nutrition Data Framework.
 - e. Development of necessary reports and data dashboards for real time monitoring
5. Support for capacity building and training of stakeholders
 - a. Provide technical support during the initial rollout phase
6. Support pilot-testing in select rural and urban schools and validation workshops
 - a. Pilot testing reports and updates to module based on feedback

Key deliverables:

1. Business Requirements Document (BRD) validated by UNICEF and key stakeholders outlining functional requirements, workflows, data elements, indicators, reporting needs, interoperability requirements, and user roles.
2. Technical Design Document for the Nutrition Module, including data schema, workflows, and integration points, data protection and access control model (user roles, permissions).
3. Digital nutrition module within the existing EMIS platform developed.
4. Standard nutrition reports and dashboards to support the collection and analysis of real-time, high-quality nutrition data, and facilitate interoperability with current and planned future systems.
5. Comprehensive documentation including training materials, user manuals, related SOPs, maintenance manuals, integration, and other relevant specifications developed.
6. Data Protection and Risk Mitigation Notes, outlining how sensitive child nutrition and health data will be protected in line with UNICEF data responsibility standards.
7. Pilot test report including feedback and system refinements.
8. Final assignment report and knowledge transfer, including recommendations for sustainability and scaling

The consultant may be required to collaborate with existing OpenEMIS developers where necessary to ensure interoperability and avoid duplication of efforts. The TOR is designed to allow either the current development team or an external consultant to deliver the required outputs.

PAYMENT TERMS

Activities	Deliverables	Deliverable Date	Percentage Payment
Phase 1: Requirements Analysis & Design 1. Inception phase - Produce a technical inception report with a detailed workplan and timelines based on discussions with UNICEF	<ul style="list-style-type: none"> Inception report and workplan, timelines 	Month 1	10%
2. Business Requirements Document (BRD) validated by stakeholders 3. High-level functional design aligned to the approved BRD	<ul style="list-style-type: none"> BRD Design specifications 	Month 2	10%
Phase 2: Development & Integration 4. Development of digital nutrition module - System design, development, and integration. 5. Development of knowledge management products, and user guides on use and management of digital nutrition module	<ul style="list-style-type: none"> Digital nutrition module developed. Ensure traceability between the approved Business Requirements Document (BRD), system design specifications, and developed functionalities. Module meets functional requirements outlined in the Joint Data Framework. Knowledge products - user-friendly manuals and interpretive material, related SOPs and user guides, maintenance guidelines and data management framework 	Month 7	40%
Phase 3: Testing, Deployment & Training 6. Support pilot testing, refining of module and knowledge products according to user feedback 7. Support training and capacity building of stakeholders on the use and management of the digital nutrition module	<ul style="list-style-type: none"> Pilot testing reports and feedback Updates to module based on feedback Users are trained on administration and use of the module 	Month 9	30%
Phase 4: Handover 8. Ongoing technical support, finalization, documentation, and handover	<ul style="list-style-type: none"> Final module, documentation, knowledge products, handover notes including recommendations for scaling 	Month 12	10%

Please note that UNICEF's payment policy is to pay for the performance of contractual services rendered and to effect payment upon the achievement of specific milestones and provision of agreed deliverables as described in each Contract. Therefore, payment terms are within 30 days Due net after receipt of accurate invoice(s) and performance of all tasks/activities and receipt and acceptance of each agreed deliverable by UNICEF.

TECHNICAL REQUIREMENTS & QUALIFICATIONS

<p>Education:</p> <p>Advanced university degree in information technology/systems, computer science, data analytics or other related fields.</p> <p>Relevant certifications in software development, database management, or system architecture (e.g., Microsoft Certified: Azure Developer Associate, AWS Certified Developer, etc.) are advantageous.</p> <p>Experience:</p> <p>Professional Experience:</p> <ul style="list-style-type: none"> • Minimum of 5 years of experience in software development, with a focus on operationalizing education data management systems using digital solutions at the national or international level • Proven experience in designing, developing, and deploying scalable, secure software solutions. • Experience in developing systems for health/nutrition or public sector projects is highly preferred. • Experience working on projects involving data integration, including working with external data sources or APIs. • Experience with data flow analysis, system architecture, and data modeling. <p>Project Experience:</p> <ul style="list-style-type: none"> • Project experience in developing similar tools • Experience in managing a large-scale international development project with government partners • Experience in developing countries, preferably Jamaica/Caribbean • Experience working in a cross-functional team with both technical and non-technical stakeholders to ensure successful project delivery. • Familiarity with nutrition and school feeding data standards. <p>Previous Involvement in Agile Projects: Experience working in Agile development environments, including sprint planning, daily stand-ups, and backlog management. Familiarity with version control tools like Git and collaboration tools like Jira or Trello.</p> <p>Fluency in English is required</p> <p>Experience working with UNICEF, UN agencies or other international development agencies an advantage</p>	<p>Technical Skills:</p> <ul style="list-style-type: none"> • Strong knowledge of modern programming languages such as Java, Python, C#, or PHP. • Proficiency in front-end technologies like HTML, CSS, JavaScript, and frameworks such as React, Angular, or Vue.js. • In-depth experience with back-end development using frameworks such as Spring Boot, Django, or Node.js. • Proficiency in database design and management (SQL and NoSQL databases such as MySQL, PostgreSQL, MongoDB, etc.). • Familiarity with cloud services (AWS, Azure, Google Cloud) and DevOps practices for deployment and monitoring. • Knowledge of data security practices and ensuring the confidentiality and integrity of sensitive data. <p>Competencies:</p> <p>Technical Competencies:</p> <ul style="list-style-type: none"> • Problem-Solving: Ability to analyze complex requirements, design efficient algorithms, and deliver scalable software solutions. • System Design: Strong skills in designing robust and scalable system architectures, including microservices, API integrations, and multi-layered applications. • Database Management: Expertise in relational and non-relational databases, and the ability to design, implement, and optimize complex database schemas. • UI/UX Design: Experience in building intuitive, user-friendly interfaces that are aligned with the needs of non-technical users. • Testing and Debugging: Proficiency in writing unit tests, performing integration testing, debugging, and resolving performance issues. • Cloud and DevOps: Experience in deploying software on cloud platforms and using CI/CD pipelines for automation and deployment. <p>Soft Skills:</p> <ul style="list-style-type: none"> • Communication: Strong ability to communicate technical details to government and non-technical stakeholders. • Collaboration: Ability to work in close collaboration with consultants, project managers, and other stakeholders to ensure project goals are met. • Attention to Detail: Ability to produce clean, error-free code and ensure system requirements are met accurately.
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<p>Prior experience working directly with OpenEMIS or similar EMIS platforms is a strong asset.</p>	<ul style="list-style-type: none"> • Ability to adapt to new technologies, platforms, and tools as the project evolves or as new requirements are introduced. • Security Awareness: Strong understanding of data protection principles, especially regarding sensitive data, ensuring systems are compliant with government standards and best practices.
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All applications will be evaluated based on 70 points for technical - (knowledge /expertise /skills) and 30 points for financial submissions.

Child Safeguarding
Is this project/assignment considered as “ Elevated Risk Role ” from a child safeguarding perspective?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes, check all that apply</i>
Direct Contact Role
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please indicate the number of hours/months of direct interpersonal contact with children, or work in their immediately physical proximity, with limited supervision by a more senior member of personnel:
Child Data Role
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please indicate the number of hours/months of manipulating or transmitting personal-identifiable information of children (name, national ID, location data, photos):
More information is available in the Child Safeguarding SharePoint and Child Safeguarding FAQs and Updates

Budget/ costs indicated are estimated. Final rate shall follow the “best value for money” principle, i.e., achieving the desired outcome at the lowest possible fee. Consultants will be asked to stipulate all-inclusive fees, including lump sum travel and subsistence costs, as applicable.


Payment of professional fees will be based on submission of agreed deliverables. UNICEF reserves the right to withhold payment in case the deliverables submitted are not up to the required standard or in case of delays in submitting the deliverables on the part of the contractor.

Individuals engaged under a consultancy will not be considered staff members under the Staff Regulations and Rules of the United Nations and UNICEF’s policies and procedures and will not be entitled to benefits provided therein (such as leave entitlements and medical insurance coverage). Their conditions of service will be governed by their contract and the General Conditions of Contracts for the Services of Consultants and Individual Contractors. Consultants and individual contractors are responsible for determining their tax liabilities and for the payment of any taxes and/or duties, in accordance with local or other applicable laws.

Travel will be covered by UNICEF as per policy.

- Travel costs will be estimated and added to the contract once they are determined based on UNICEF Financial Rules and Regulations.
- For agreed country visits, the contractor/consultant will be responsible in administering their own travel. UNICEF will reimburse travel related expenses based on actual costs or on the below criteria whichever is lower and upon presentation of receipts.
- Any travel involved should be budgeted according to UN Travel Standards as a ceiling.
- [UN Secretariat Administrative Instruction on Official Travel, ST/AI/2013/3](#): Sect. 4, para. 4.2, numerals (d) and (e)

For information on Daily Subsistence Allowance (DSA), can be found on the [International Civil Service Commission website](#)

Endorsements and Approval			
Specialist			
Name:	Vonetta Nurse	Date:	
Title:	Nutrition Officer	Signature:	
Deputy Representative [If Programme]		Operations Officer (If Operation)	
Name:	Mohammad Mohiuddin	Date:	April 10, 2026
Title:	Deputy Representative	Signature:	

Administrative Details (IN OFFICE)

Note:
 Air travel will be in economy class. DSA, Terminal, etc, will be as per UNICEF travel policy for consultants/contractors. Consultants/contractors on travel status must complete the BSAFE course prior to travel. No DSA is payable for consultants/contractors to be based in a particular location/duty station as those costs should be included in the fee lump sum.
 If travel costs are not based on the preferred lump sum approach, reimbursement will be based on actual costs, not to exceed standard travel costs applicable to staff travel (economy class).
 If there is a high likelihood of change-in-travel plans, the TOR budget estimates should aim at the highest potential travel costs to avoid cost-based extensions.

Sourcing (local/international, both)	Both
Title of the Consultancy/Contract for advertising	Development of a Nutrition Information Module within Jamaica's EMIS under the SDG Joint Programme: Empowering Jamaica's Future: Digital Transformation for Education

Included in Annual/ Rolling Workplan	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If it is included, please write Outcome/Output/Activity. If not, please explain.

a)	
b)	

<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	UNICEF email address
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Office Based
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Remote