





Terms of Reference for the Evaluation of the Transitional phase of the Mastercard Foundation Scholars Program at AIMS

1. Background

The Mastercard Foundation Scholars Program at the African Institute for Mathematical Sciences (AIMS) was initiated to address Africa's need for skilled Science, Technology, Engineering, and Mathematics (STEM) professionals who can drive economic development and innovation. Initiated in 2014, Phase One of the program enabled 510 Mastercard Foundation Scholars from across 35 African countries to access higher education, A 99% program completion rate and notable gender inclusivity was achieved, with 61% of the Mastercard Foundation Scholars being young women. Phase One had additional sustainable impact on mathematics education through a "train-the-trainer" model, equipping over 3,000 teachers in Cameroon to deliver inclusive and engaging mathematics education at the secondary school level. This initiative reached over 590,000 students in Cameroon and fostered a culture of scientific inquiry, particularly among female students.

A period of transitional funding was implemented between 2021 and 2024 to sustain momentum, address ongoing needs, and build on the successes of Phase One, serving as a crucial transition to Phase Two of the Mastercard Foundation Scholars Program at AIMS. During this period, the program supported 403 Mastercard Foundation Scholars in accessing high-quality STEM education at AIMS, emphasizing the education-to-career transition, transformative leadership, expanding STEM capacity, and promoting community engagement and give-back initiatives. The transitional funding Phase was also essential for ensuring more young Africans continue accessing high-quality STEM education at AIMS and refining program strategies based on lessons learned from Phase One.

Phase II of the Mastercard Foundation Scholars Program at AIMS was launched in August 2024. The Program will train 1,350 graduate-level Scholars over the next six years, with 60% being women, in mathematical sciences and its applications, offering full scholarships and tailored support. Building on the success of Phase 1, the program focuses on achieving a 100% transition rate for Mastercard Foundation Scholars into employment, further studies, or entrepreneurship by providing work-integrated learning opportunities such as internships and business incubation. It emphasizes diversity, ensuring 60% female participation and the inclusion of refugees and persons with disabilities (10% each). A new cooperative master's program in mathematical epidemiology will address health sector needs and foster transformative leadership and entrepreneurship. The initiative will also increase access to AIMS educational offerings by supporting the establishment of five new satellite campuses.





2. Objective of the Evaluation

This evaluation aims to assess the Transitional Funding Phase of the Mastercard Foundation Scholars Program at AIMS, focusing on achievements, impacts, challenges, overall effectiveness, and lessons learned. It will provide insights into the Transitional Funding Phase effectiveness and help develop a Theory of Change for Phase Two, ensuring the program aligns with the Mastercard Foundation Scholars Program core objectives of access, quality & relevant learning, dignified & fulfilling work, and transformative leadership. The findings will also guide Phase Two's implementation, emphasizing program impact, improving inclusivity, and aligning with AIMS and the Mastercard Foundation's strategic priorities.

3. Specific objectives

- Review the achievement of the Transitional Funding Phase: Collect, review, and verify the progress and achievements of the Transitional Funding Phase, identifying the critical factors that contributed to its success and its intended and unintended impacts.
- Generate Lessons for Improved Delivery of Phase Two: The evaluation will identify lessons learned, highlight successes, and pinpoint areas for improvement, focusing on efficiency, relevance, and scalability. This process will inform refinements to program components, enhance delivery mechanisms for Phase Two, and provide recommendations for optimizing the project's effectiveness and impact.
- Develop a Theory of Change for Phase Two, grounded in evaluation findings, to provide a roadmap
 for achieving the program's goals. This framework will link program activities to desired outcomes,
 focusing on Access, Quality, Learning, Dignified and Fulfilling Work, Transformative Leadership,
 and Giving Back. It will integrate lessons and challenges from the First and Transitional Phases of
 the Mastercard Foundation Scholars Program at AIMS to guide the achievement of the program's
 objectives.
- Informing Stakeholders and Supporting Strategic Decision-Making: By delivering a detailed assessment of program performance, the evaluation will support informed decision-making and contribute to a more effective and impactful strategy for Phase Two's implementation.

4. Scope of the evaluation

The evaluation of the Mastercard Foundation Scholars Program Transitional Funding Phase will cover the period from 2021 to 2024, assessing program activities across the AIMS Centres in Cameroon, Ghana, Rwanda, Senegal, and South Africa. It will examine the program's implementation, partnership coordination, and the roles of key stakeholders, including AIMS and the Mastercard Foundation. The assessment will focus on institutional strengthening, support for the Mastercard Foundation Scholars, sustainability of outcomes, and the effectiveness of strategies to meet the needs of diverse scholar demographics.







Key areas include Scholar's support and engagement, sustainability, and the effectiveness of program design and assumptions, particularly in promoting inclusion for women, refugees, and persons with disabilities. The evaluation will also review the program's integration of cross-cutting themes, such as gender inclusion and accessibility. Lastly, it will analyze the overall implementation strategy to draw actionable lessons, inform improvements, and develop a Theory of Change for Phase Two.

5. Evaluation Questions

The following key questions will guide the transitional phase evaluation:

- Effectiveness and Implementation
 - To what extent were the goals and objectives of the Transitional Funding Phase achieved?
 - How effective were the implementation modalities in delivering key program activities such as Scholars support, mentorship, and career transitions?
 - o How effectively were partnerships with academic institutions, industry, and regional stakeholders managed to support Scholars' outcomes?
 - o To what extent did the program succeed in supporting vulnerable groups (e.g., women, refugees, internally displaced persons, persons with disabilities)?
- Program Design and Assumptions
 - To what extent did the program's design and underlying assumptions remain valid throughout the Transitional Funding Phase?
 - o How responsive was the program to emerging challenges, particularly in supporting underrepresented groups such as women, refugees, internally displaced persons, and individuals with disabilities?

Impact and Outcomes

- What were the key achievements of the Transitional Funding Phase regarding scholars' outcomes (e.g., employability, leadership development, and community engagement)?
- How did the Transitional Funding Phase affect scholars' transitions to employment, further studies, or entrepreneurship?
- What capacity-building outcomes did AIMS achieve as an institution during this phase?

Challenges and Lessons Learned

- What challenges were encountered during the Transitional Phase, and how were they addressed?
- What lessons were learned that could inform improvements in program design and implementation for Phase Two?
- How sustainable are the outcomes achieved during the Transitional Phase, particularly regarding scholars' long-term career paths and leadership roles?
- What strategies or best practices from the Transitional Phase can be replicated or scaled in Phase Two?





- Theory of Change for Phase Two
 - What key insights from the Transitional Funding Phase should inform the development of the Theory of Change for Phase Two?
 - How should the program's strategic outcomes (Access, Quality & Relevant Learning, Dignified & Fulfilling Work, Transformative Leadership, & Giving Back) be refined based on the Transitional Phase evaluation?

6. Deliverables

The evaluation of the Mastercard Foundation Scholars Program Transitional Funding Phase will produce the following key deliverables:

- **Inception Report**: A report detailing the evaluation methodology, timeline, and data collection tools aligned with the evaluation objectives and questions to be submitted within two weeks of contract initiation. This report will ensure alignment between the evaluation team and stakeholders on objectives and methods.
- Data Collection Instruments: Tailored tools for data collection, including surveys, interview guides, and focus group discussion templates, designed to capture insights aligned with the evaluation objectives. These instruments will be prepared and shared for review before data collection begins.
- **Draft Evaluation Report:** An initial report presenting preliminary findings on the program's achievements, impact, challenges, and lessons learned, along with strategic recommendations for Phase Two. The draft should be submitted within two months of the evaluation's start date.
- **Final Evaluation Report:** A comprehensive 30 50 pages report that incorporates feedback from the draft and covers all evaluation areas, including effectiveness, outcomes, sustainability, and inclusivity. This report will provide actionable recommendations to strengthen Phase Two and will be submitted at the evaluation's conclusion.
- Theory of Change for Phase Two: A separate, detailed Theory of Change document for Phase Two, developed based on evaluation insights. This document will provide a framework linking program activities to expected outcomes and aligning with the Mastercard Foundation's and AIMS' strategic priorities. It will serve as a guiding document for Phase Two's strategic direction and will be delivered alongside the final evaluation report.
- Executive Summary: A standalone summary document highlighting main findings, challenges, lessons learned, and recommendations. This summary will be prepared for broad dissemination to give stakeholders an accessible overview of the evaluation's outcomes and key recommendations.





• **Presentation of Findings:** A visual presentation summarizing key findings, lessons, and recommendations for AIMS, the Mastercard Foundation, and key stakeholders. This presentation will be delivered with the final report in a learning workshop, allowing stakeholders to engage with the evaluation outcomes clearly and concisely.

7. Management of the evaluation

The AIMS Research and Innovation Centre's (RIC) Program Delivery and Reporting team, based in Kigali, Rwanda, will manage the evaluation of the Mastercard Foundation Scholars Program Transitional Funding Phase, with operational management by the M&E Manager. The latter will coordinate daily activities, including data collection and stakeholder engagement. The Director of Programs Delivery and Reporting will provide strategic oversight, ensuring adherence to timelines and evaluation goals.

8. Required Qualifications

The consultancy firm selected for this evaluation should demonstrate expertise in evaluating and developing ToCs for educational and STEM-focused programs, particularly in Africa. The firm should have a proven track record in conducting comprehensive program evaluations using both qualitative and quantitative methodologies to provide data-driven insights and actionable recommendations. The key requirements include:

- Educational Program Evaluation: Proven experience in evaluating complex educational programs, preferably focused on higher education, STEM, and youth development initiatives in Africa. Experience evaluating the Mastercard Foundation Scholars at any African institution is desirable.
- Theory of Change Development: Proficiency in developing or refining Theories of Change, especially within multi-phase programs that enhance academic and career outcomes.
- **Mixed-Methods Expertise:** Demonstrated ability to apply mixed-methods approaches, including survey design, focus groups, in-depth interviews, and statistical analysis, ensuring a robust evaluation.
- **Stakeholder Engagement:** Experience engaging diverse stakeholders, such as students, faculty, alumni, and partners, to incorporate a range of perspectives into the evaluation process.
- Capacity for Cross-Cutting Issues: Knowledge of evaluating cross-cutting issues like gender inclusion, accessibility, and inclusivity, with insights on challenges faced by underrepresented groups (e.g., women, refugees, and people with disabilities).
- **Reporting and Communication:** Strong communication skills to deliver clear, insightful, comprehensive reports that support strategic decision-making. The firm should also be adept at effectively creating visual and narrative presentations to convey complex findings.



• **Team Composition:** A multidisciplinary team with expertise in STEM education, experiential learning, program evaluation, social science research, data analysis, and familiarity with African educational systems is essential.

9. Selection criteria

Each proposal will be evaluated according to the weighted criteria presented in Table 1.

Table 1. Proposals evaluation criteria

| # | Criteria | Description | Assessment method | Weight |
|---|--|--|--|--------|
| 1 | Experience Evaluating Similar Programs | Demonstrated experience in evaluating educational and STEM-focused programs in Africa. | Submission of two previous evaluation reports. | 20% |
| 2 | Experience Developing Theories of Change | Proficiency in creating or refining Theories of Change for comparable initiatives. | Submission of one Theory of Change from a similar project. | 15% |
| 3 | Proposed Methodology | Quality and suitability of the proposed methodology for the evaluation, and ToC development including mixed-methods approach. | Evaluation of proposed methodology section in the technical proposal. | 25% |
| 4 | Team Composition and Expertise. | Multidisciplinary team with expertise in program evaluation, ToC development, data analysis, and African education systems. | Resumes and team bios in the proposal. | 15% |
| 5 | Experience in Various African Regions. | Proven experience working in diverse African regions, especially in educational program contexts. Language abilities (English, French, etc.) | List of projects completed across different African regions. Inclusion of English speaking and French speaking team members. | 10% |
| 6 | Financial Proposal | Cost-effectiveness and transparency of the proposed budget in relation to the scope of work. | Evaluation of detailed financial proposal. | 15% |

10. Application Process

Consultancy firms interested in this opportunity are invited to submit a proposal that addresses the requirements and selection criteria outlined in this ToR. The application process will proceed as follows:





- **Submission of Proposals:** Proposals shall be submitted electronically by 21 January 2025 to programevaluation@aimsric.org.
- Proposal Requirements: Proposals must include the following components:
 - Cover Letter: Providing a brief introduction to the firm and an overview of its suitability for the evaluation.
 - Proposed Methodology: Providing a detailed outline of the methodology, including data collection tools and analytical approaches, tailored to the scope of this evaluation.
 - Team Composition and Qualifications: A brief bio of team members and their resumes and bios, highlighting their specific roles and expertise related to this evaluation.
 - Experience in African Regions: A list of relevant projects completed in various African regions,
 language of the evaluation, and with a brief description of each project's scope.
- **Financial Proposal:** A detailed budget breakdown indicating costs associated with personnel, travel, data collection, and other relevant expenses.
- Evaluation and Shortlisting: An internal evaluation committee will review proposals based on the provided selection criteria in Table 1. Firms will be shortlisted based on their demonstrated experience, the suitability of the proposed methodology, team qualifications, and the cost-effectiveness of their financial proposal.
- Interview Stage: Shortlisted firms may be invited for an interview to discuss their proposal in greater detail and clarify aspects of the methodology, team composition, and relevant experience. These interviews will also provide an opportunity to assess the firms' approaches to stakeholder engagement and project management.
- **Final Selection and Notification:** After the interview stage, the evaluation committee will make a final selection, and the selected firm will be notified. Contractual arrangements will follow thereafter.
- **Contract:** Upon agreement of terms, a formal contract will be signed, specifying the evaluation timeline, deliverables, payment schedule, and reporting requirements.