

# THE YAMORANSA MODEL LABS PROGRAM

FIRST QUARTER REPORT January - March 2022

This report was prepared by IMPLEMENTERS



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# Major Activities in the First Quarter











Our students currently support teaching conditions of

**105** 

7 teachers in Gambia

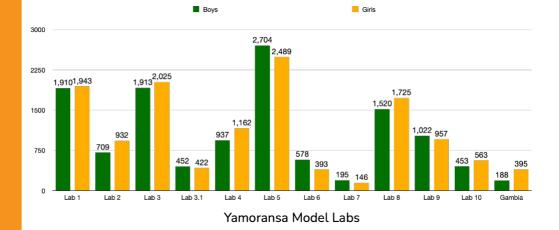
### Introduction

The Yamoransa Model Labs Program is an initiative of the Helping Africa Foundation (HAF), a US based charity dedicated to improving the health, education and social welfare conditions of the people in sub-Saharan Africa.

The Model aims to provide an opportunity for students to expand their STEM education through practical experience. The program provides selected communities with ICT (Information and Communications, Technology) centers equipped with educational content and multimedia, as well as a robotics lab, AR/VR learning and 3D Printing. Students who use these labs are fully exposed to contemporary technology and educational content to enhance their studies.

## 1.0 First Quarter Lab Patronage Statistics

	Boys	Girls	Total
Q1 Lab Usage	12587	13143	25730
	<ul><li>Boys</li></ul>	<ul><li>Girls</li></ul>	
	Girls 51%	Boys 49%	



# 2.0 Annual Impact RoundTable Discussion 2022 (AIRTAD'22)

The Annual Impact RoundTable Discussion (AIRTAD) is a brand created and managed by IMPLEMENTERS to showcase the impact of Yamoransa Model Labs Program. The AIRTAD conference includes roundtable discussions and robotics competition with the aim of promoting sustainable development through Science, Technology, Engineering and Mathematics (STEM) education in Africa.

The inaugural conference, AIRTAD'22, was based on the theme of *Complementing Government's effort in Promoting STEM Education in Ghana - The Role of the Yamoransa Model Labs Program*, The conference was organized to showcase the achievements & impact of the 12 existing YM labs. The event took place from February 23-24, 2022 at the Accra Digital Centre. The two-day event featured roundtable discussions on the first day and various competitions on the second day. AIRTAD'22 was attended by students, teachers (who serve as center managers of the project), Ghana Education Service representatives from the various benefiting districts/ municipalities, lab beneficiaries from Gambia and other invited guests including:

- 1. The Deputy Chief of Mission of the U.S Embassy in Ghana, Ms Nicole Chulick who served as the guest of honor,
- 2. Hon Elizabeth Ofosu-Adjare, Member of Parliament of Techiman North and the Promoter for the YM Lab 10.
- 3. Professor Elsie Effah Kaufmann, Professor of Biomedical Engineering at the University of Ghana, Legon and the Quiz Mistress of the renowned National Science and Mathematics Quiz (NSMQ),
- 4. Dr Yaw Okraku-Yirenkyi, the Founding Member of Ghana Robotics Foundation and RiSE,
- 5. Dr Humphrey Ayim-Darke, President of the Ghana Association of Industries,
- 6. Ms. Larisa Akrofie, Founder of Levers in Heels,
- 7. Mr. Joshua Opoku Agyemang, President, IoT Network

Hub Africa,

Mr. Yahaya Zakari Osman, Director of Operation
 (GIFEC) and among others.

There were three different roundtable discussions held on day-one. The first roundtable brought the Lab Managers together to discuss the activities at their labs and its impact on education in their various schools and communities. The second roundtable convened educational experts to discuss their various roles in complementing the government's effort to promote STEM education in Ghana . The final discussion focused on the activities and achievements of the YM Labs Program: 5 years after its inception.



Speaking at a roundtable discussion on the impact of the Yamoransa Model Labs, the President of the HAF, Dr. Deborah Rose mentioned that the Yamoransa Model Labs Program started sometime in 2016 after a visit by the Yale Alumni Service Corps to Yamoransa in the Central Region of Ghana to help the community build an ICT facility. She added that the Yamoransa Model since its inception in 2016, has evolved from the building of standard ICT labs to the building of more advanced centers conducive for robotics training, coding, and other activities. The Model now extends to 11 labs across 10 regions in Ghana and a lab in the Gambia.

The Executive Director of the Foundation, Mr. Japhet Aryiku called on the government to commit to replicating the Yamoransa Model Labs initiative across the country adding that such intervention will greatly boost the promotion of STEM education in Ghana.

"We believe that STEM education is the way to go in increasing productivity, opening up our economy and facilitating the next phase of our development and it is important that the government commit resources to this. The Yamoransa Model Labs initiative has set the example for this and we believe it can be replicated across the country, especially in rural areas" Mr. Ayiku said.

The Project Director of IMPLEMENTERS and the Yamoransa Model Labs, Mr. Kafui Prebbie, mentioned that the Yamoransa Model Labs program has evolved greatly over the years; thanks to the involvement of two Ghanaian based companies, TECHAiDE, the technology partners of the Yamoransa Model and IMPLEMENTERS the projects manager of the Yamoransa Model who have worked together for about 6 years.

"I am excited that this project is manned by two Ghanaian companies who have no doubt showed a great level of commitment by traveling across the country and outside to get the Yamoransa Model Labs successfully built and installed with gadgets for use." He highlighted that the project in the last year has impacted the lives of over 73,000 students, from 125 communities from some 10 regions of Ghana with about 75 teachers getting trained in the area of STEM and Robotics.

Hon Elizabeth Ofosu-Adjare, the MP for Techiman North Constituency and promoter of STEM education in Ghana, expressed her gratitude to the Helping Africa Foundation for providing her community with a YM Lab in 2021. She indicated that, since the commissioning of the labs in November 2021, students' attendance in the catchment area has increased greatly due to a new interest in robotics by the students. She further used the opportunity to call on the government to support such worthy initiatives by NGOs.

The competitions held on the second day showcased the students' knowledge in STEM as well as their ability to solve problems using the robotics equipment provided to their various labs. At the exhibition section where the students competed for the most Innovative Product Award, the students invented products such as phone stands, blind walking sticks, smart dustbins, sanitizer dispensers, toothpaste squeezers, water irrigation systems,s and so many more. Students from nine (9) of the Yamoransa Model Labs in Ghana and 1 Yamoransa Model Lab in the Gambia also competed in a Quiz and Robotics competition.

Speaking at the Robotics competition, Prof. Elsie Effah Kaufmann applauded the organizers of the competition for organizing practical STEM competitions at the junior high school level adding that these practical skills are what will lead to innovation.

For the competitions, both EDULab and Makerspace (Robotics),

- 1. YM Lab 5 from Kyebi, Eastern Region won first place,
- 2. YMLab2, L&A Memorial School, Greater Accra won second place, 3. and YM Lab 4, Choggu, Northern Region won third place.

The most Innovative Product Award went to YM Lab 2.

Other activities during the AIRTAD'22 was the commemoration of the 154th posthumous birthday of W.E.B Du Bois. The commemoration consisted of remembrance speeches and a wreath laying at the burial site of Du Bois.



The team from Helping
Africa Foundation



Participants of AIRTAD'22



Overall Winners of the EDULab and Makerspace Competitions at AIRTAD'22 -YM Lab 5



First Runner up - YM Lab 4



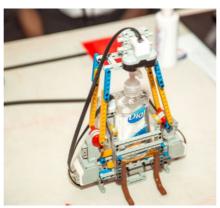
Second Runner-Up and winners of Most Innovative Product - YM Lab 2



Team from YM Lab 3.1, Akrokerri, Ashanti Region receiving their award as winners of the Senior High Schools Category



The participants of YM Lab 3 being given a pep talk by their GES Representative and Centre Managers



Sanitizer dispenser created with the EV3 Lego kits by participants from YM Lab 5



IMPLEMENTERS, the creators of the AIRTAD Brand and Project Managers for the YM Labs Program



Some staff of TECHAiDE, the Technology Partner of the YM Labs



Professor Elsie Effah Kaufmann awarding a student



Best Center Manager 2022 - Edward Owusu Kwarteng, Center Manager at YM Lab 8, Bogoso, Western Region

#### 3.0 Monitoring Visits

Crucial to the success of the YM Labs Program is the need for continuous monitoring of the existing labs. The funders of the program together with the project managers visited the first 4 labs to assess the management and sustainability of the labs. The Yamoransa Model Development Committees (YMDC), which is the local managing board of the YM Labs Program, of the various labs presented plans to ensure that the labs are well maintained and self-sustaining, which is a core component of the YM Model. The labs visited were

- 1. YM Lab 1, Yamoransa, Central Region,
- 2. YM Lab 2, Mallam-Gbawe, Greater Accra Region,
- 3. YM Lab 3, Ejura & Sekyeredumase, Ashanti Region,
- 4. and YM Lab 4, Choggu, Northern Region.

Also, the team paid a courtesy call to the Headmaster of one of the new labs dedicated in October 2021, YM Lab 3.1, Akrokerri, Ashanti Region since the President of HAF had been unable to attend the dedication ceremony.







Photos of monitoring team and Center Managers of two of the labs visited

#### 4.0 Final Dedication Ceremony for YM Lab 8, Bogoso, Western Region

A final dedication of the YM Lab 8 was held to complete this project. The building had only been partially completed when the center was initially dedicated in 2020. The work on the second floor had stalled due to a lack of funds. Thankfully, with the community's dedication and support, the building has been fully completed and all technology equipment has been installed by TECHAiDE, the technology partner for the YM Labs Program.







YM Lab 8 final dedication and display by students at the Makerspace Lab at the final dedication ceremony

#### 5.0 Needs Assessment

Every year, the YM Labs Program begins working toward fulfilling the goal of installing 16 labs in all 16 regions of Ghana. Due to the AIRTAD conference, the Needs Assessment which is normally conducted in the first quarter of year had to be shifted to the second quarter. However, preparations for the needs assessments were carried out in the first quarter, and plans have been put in place to complete the needs assessments in the first month of the second quarter.

# 6.0 YM Lab Sustainable Management Plan

The YM Labs have been tasked to create a plan to ensure that they are self-sustaining . The labs have been encouraged to open official bank and mobile money accounts to help with fundraising and overall fiscal management. So far, three labs - Labs 4, 7 & 8 have opened bank accounts.

#### 7.0 Summary of the Quarter

The first quarter of 2022 in the Yamoransa Model Labs Program was eventful. The beneficiaries of the labs prepared and participated in the Annual Impact RoundTable Discussion which was held at the Accra Digital Center from February 23-24, 2022. In all the labs recorded a total of 25,730 usages in the first quarter. Other activities in the quarter included monitoring visits, final dedication of YM Lab 8 and needs assessment for the new lab projects.

#### 8.0 Gallery

#### More Pictures from AIRTAD'22







Arrival of Participants to AIRTAD'22



Mr Kafui Dey, a broadcast journalist at GBC and a seasoned MC, served as the MC for AIRTAD



Dr Humphrey - President of the Ghana Association of Industries at AIRTAD'22



Ms Nicole Chulik - Deputy Chief of Mission, US Embassy in Ghana



Promoter for YM Lab 10 and Member of Parliament for Techiman North at AIRTAD'22



Mr Kafui Prebbie, Projects Director of the IMPLEMENTERS and Project Manager the YM Labs Program



RoundTable discussion on the 5 years Journey of the YM Labs Program







Roundtable discussion with Center Managers, Students and GES Reps





Team from Gambia - Center Manager & Convener from YM Lab in Gambia



Automatic Handwash by YM Lab



Some products being exhibited





Panel members at the Career Guidance Session





Some Centre Managers of the YM Labs Program

GES Representatives/Conveners of the YM Labs



Appreciation of the HAF team for their immense support to education in Ghana





The Yamoransa Model Labs Program (www.yamoransamodel.org) is managed by IMPLEMENTERS (www.TheImplementers.org). IMPLEMENTERS is a project management nonprofit that partners with charitable organizations, philanthropists to impact society.

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### **TECHAIDE**

TECHAiDE (www.techaide.global), the technology partner of the YM Labs Program, is a technology social enterprise working in Africa for over a decade using ICTs to improve education, support Youth Development and facilitate health delivery.