



AFRICAN
CHILD
PROJECTS

2023

SCHOOL CONNECTIVITY

PHASE III REPORT



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A WORD FROM THE BOARD CHAIR

Greetings, Esteemed Supporters,

As the **Board Chair of African Child Projects**, it is an honor to address you through the pages of our Annual Newsletter. This year has illuminated our path as we work tirelessly to build bridges between Africa and the global community, fostering a brighter future for the children who hold our collective hopes and dreams.

Connecting Hearts and Minds

African Child Projects stands as a bridge, spanning the gap between the challenges faced by African youths and the solutions that lie within our shared humanity. Over the past year, we have redoubled our efforts to create meaningful connections between the diverse worlds that make up our global family. Through collaboration, empathy, and a shared commitment to change, we are working hand in hand with communities both near and far to uplift the lives of African youths.

A Global Approach to Change

Our journey is one of unity, transcending geographical borders. With the steadfast support of individuals and organizations from around the world, we have been able to implement transformative projects that address the multifaceted needs of African youths. From education and technology to creative expression and personal development, our initiatives are a testament to the positive change that can be achieved when hearts and minds come together.

Education: A Bridge to Empowerment

At the heart of our mission lies the belief that education is a powerful bridge that empowers children to realize their potential. In the past year, we have taken significant strides in expanding access to quality education, building bridges that enable young minds to flourish. Through connectivity, educational resources, and technology-driven learning, we are empowering African children to bridge the gap between aspiration and achievement.

Gratitude: Our Guiding Light

None of our accomplishments would have been possible without the unwavering dedication of our supporters. Your belief in our cause and your commitment to bridging worlds have been the driving force behind every milestone. As we navigate the challenges and triumphs of each day, we do so with immense gratitude for your partnership.

Join Us on the Bridge

The bridge we're building is strong, but it's a collective effort. I extend a heartfelt invitation to all of you to continue walking alongside us on this transformative journey. Together, we can reinforce the connections that empower African children, transforming their lives and creating a legacy of positive change that spans generations.

In closing, let our shared commitment to bridging worlds serve as a testament to the boundless possibilities that lie ahead. With your support, African Child Projects will continue to stand as a bridge of hope, unity, and progress for the children who deserve nothing less.

ESTHER LUGOE MENGI

**AFRICAN CHILD PROJECTS
BOARD CHAIR**

GLOBAL REVIEW

PHASE 3 REPORT



A GLOBAL REVIEW

School connectivity is a crucial global endeavor. It brings the world's knowledge to students' fingertips, regardless of location. With internet access, students access diverse resources, teachers enhance their methods, and communities benefit. Connectivity isn't just about technology; it's about equal opportunity and a brighter future for all.



ABOUT THE PROJECT.

The "**School Connectivity Phase III**" project aims to build upon the achievements of Phase I and II by focusing on the lesson learnt and best practices observed in the previous phases. . In Phase III we went beyond installing internet connections in schools and donating ICT devices in schools - but rather enhancing systems that **embraced ICT in Teaching and Learning to benefit both teachers and students**. Through our partnership with **Academic institutions** we worked alongside **30 technicians** pursuing Telecommunications Engineering and Computer Science from (**UDSM, DIT AND ATC**) to reach **101 schools** in **15 regions (Tanzania Mainland and Zanzibar)**. The project's goal is to connect 300 new schools during 2023/2024 contributing to the national effort of universal school connectivity, establish guidelines and measurable goals for affordable internet access, while also driving the digital transformation of education in Tanzania.

PROJECT PARTNERS:



ABOUT AFRICAN CHILD PROJECTS



AFRICAN CHILD PROJECTS is a youth-led organization registered as Non-Governmental Organization (NGO) under the NGO Act of 2002.

AFRICAN CHILD PROJECTS focuses on bridging the digital divide and bringing internet access to communities in Tanzania by building digital societies. With projects around 4 thematic areas: **Technology, Education, Research, Policy and Regulations**

OUR MISSION

"Build bridges between Africa and the World"

With this we aim to bridge the digital divide and bringing internet access to communities in Tanzania by building digital societies.



OUR VISION

"Transformed Communities"

Our vision drives initiatives and actions that empower individuals, enhance living conditions, and foster sustainable growth within these communities.





AFRICAN
CHILD
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OUR MOTTO:

"TRANSFORMED COMMUNITIES"

MAIN OBJECTIVE AND GOALS



Initiated in Phase I, the project launched with a pilot program involving 10 public schools. Encouraging results from this initial phase propelled us into Phase II, where connectivity was successfully extended to 50 public schools across Tanzania.

Currently advancing through Phase III of implementation with ambitious objectives of establishing connectivity in a total of 300 public schools. With 101 schools already empowered with digital access, our efforts continue, including the ongoing work to connect an additional 41 schools under Vodacom Tanzania Foundation and 159 schools will be connected under UCSAF making it a total of 300 schools.

Importantly, our commitment doesn't conclude there. Our determination to achieve equitable digital access in education remains unshaken. Beyond these 50 schools, our expansion will persist until all 300 schools are seamlessly integrated into the digital network. This expansion encompasses 20 schools in Zanzibar, showcasing our dedication to inclusivity and impact.

Central to this journey is our resolute focus on elevating the standards of public education in Tanzania. Our aspiration to bridge the digital divide and ensure a brighter future for all students and educators remains steadfast. With every stride forward and each successful connection, we draw nearer to a future where every student can flourish in the digital age.

PROJECT OBJECTIVES

INCREASE STUDENTS PERFORMANCE BY 5% ANNUALLY

The education system in Tanzania, has been for so long known to have an imbalance whenever performances between public and private schools are compared.

Despite these inequalities, public schools have still been more populated with students than private institutions, a factor accelerated by costs of expenses, proximity from homes (especially rural areas) and the per capita income of majority of Tanzanian families. It was therefor without doubt, that the urge to provide solutions to **less number of teaching materials, unequal ratio between number of students and teachers and low competence and performance revealed by graduates from public secondary schools in Higher learning institutions or on national examination results, was necessitated.**

The integration of e-learning platforms in public secondary schools, through **School Connectivity Project** has revolutionized the traditional classroom experience. The convenience of online materials, interactive lessons, and multimedia content has significantly heightened student engagement, making learning more exciting and effective.

USE OF ICT IN TEACHING AND LEARNING BY ALL SUBJECT TEACHERS

Teachers have also benefitted from this transformation, as e-learning platforms offer that aid intergration of ICT in teaching, like E-fahamu, Maktaba Tetea and TIE Online library. The seamless communication channels have strengthened the student-teacher relationship, enabling continuous support even beyond classroom hours.

Notably, the implementation of e-learning platforms has led to a substantial increase in academic performance across various subjects. Standardized test scores have witnessed a commendable upswing, reflecting a deeper understanding of the subjects and enhanced critical thinking skills among students.

Furthermore, the e-learning approach has nurtured a sense of independence and self-discipline in students. With the freedom to pace their learning and revisit materials as needed, students have shown a greater commitment to their studies. This newfound responsibility has translated into improved time management and organizational skills, preparing them for higher education within and beyond state borders in future endeavors, where ICT and e-learning are highly depended on.

From the 1st phase where only ICT teachers received trainings, the project impact analysis necessitated the enrollment of all subject teachers in a more advanced training on the third phase, thus, increasing the impact on the introduction of ICT and practical e-learning unlike in the past phases.



TECHNOLOGY USED



Due to rapid technological advancements, we deployed and utilize robust technology infrastructure to enable seamless e-learning. The key components of this infrastructure include the MikroTik LHG LTE antennae, MikroTik hAP ac2 routers, and KoboToolbox for data collection.

MikroTik hAP ac2 Routers/Local Network Control Centre (LNCC)

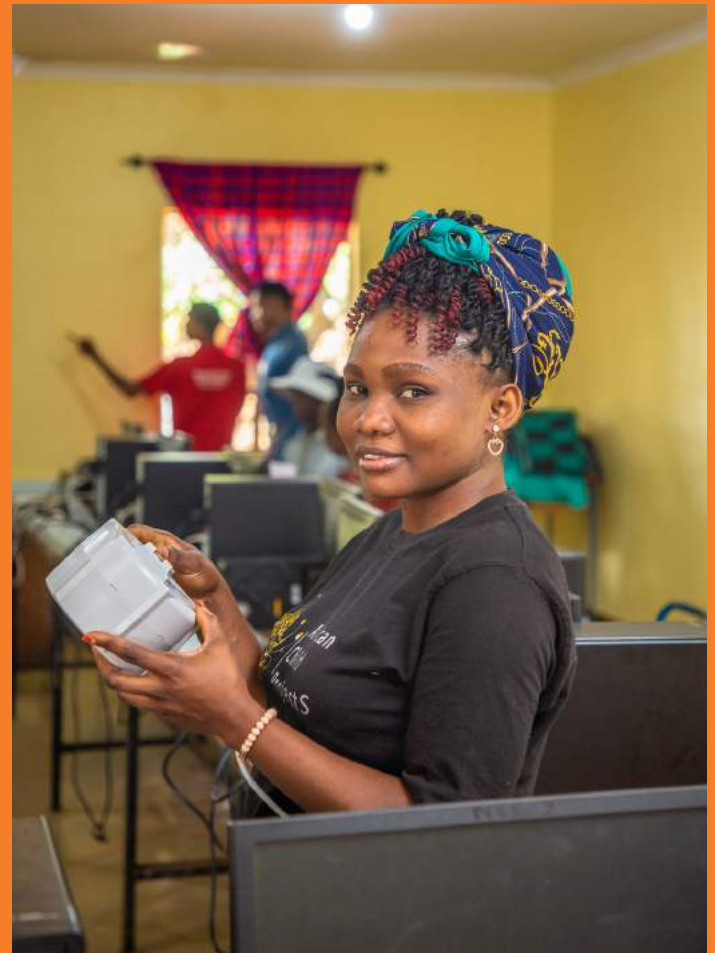
Router with whitelist handling and Signaling connecting to Basic Internet backend system for vouchers and Scripts for update of whitelist.

MikroTik LHG LTE Antennae:

Establishing a reliable and high-speed internet connection. These antennae ensure fast and stable connectivity even in areas with limited traditional broadband infrastructure. With their directional antenna design, these devices offer extended coverage and improved signal strength, ensuring that students and teachers can access online resources without interruption.

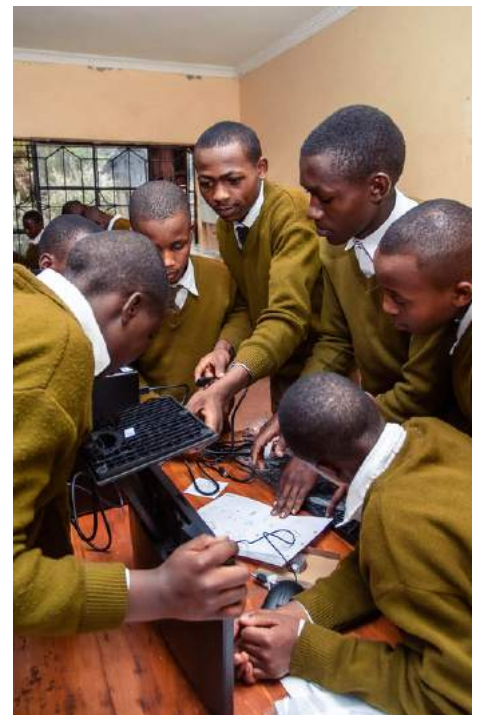
KoboToolbox for Data Collection:

This is a powerful open-source platform that empowers the collection of data during the operation period to keep track of the progress and project evaluation.



KEY PERFORMANCE INDICATORS (KPIs) DRIVING PROJECT ACTIVITIES

We have identified four critical performance indicators (KPIs) that serve as the cornerstone interventions guiding our project activities. These interventions play a pivotal role in directing and shaping the course of our project, ensuring its successful implementation and desired outcomes



KPI 1: EASY ACCESS TO EDUCATIONAL CONTENTS

Our commitment involves ensuring convenient access to educational content for Tanzanian public schools. This is achieved through the provision of tablets and computers for smooth accessing of the **E-Fahamu Platform**, a Vodacom zero rated educational tool aligned with the Tanzanian curriculum from Form 1 to Form 6. Going beyond textbooks, this comprehensive platform offers interactive learning modules and multimedia resources. It caters to students lacking physical textbooks by consolidating all required content in a single digital space.

The E-Fahamu Platform enables convenient access for both students and teachers, facilitating flexible and continuous learning. The initiative's goal is to enrich educational opportunities and create a seamless learning journey for Tanzanian students. Our aim is to establish an environment conducive to educational growth and proficiency. Through the use of technology in learning we are dedicated to empowering students, elevating educational achievements, and preparing them for academic success..

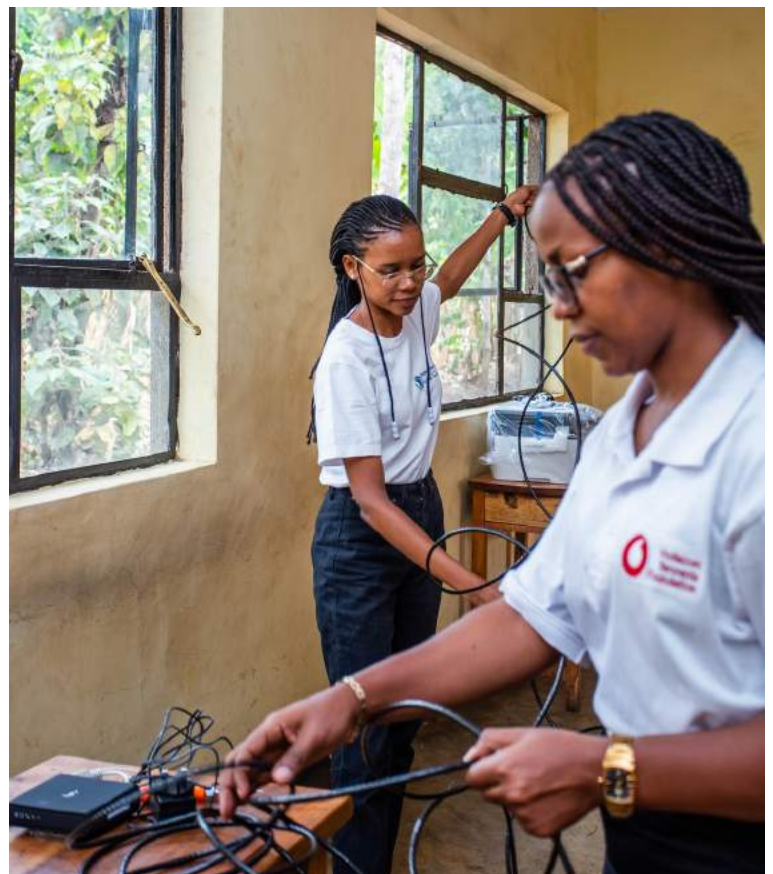


KPI 2: CONNECTING SCHOOLS TO INTERNET



This initiative facilitates seamless access to the E-Fahamu Platform by Vodacom for students and teachers alike. Across a total of 101 schools, we have distributed an impressive inventory of resource of: 145 tablets, 204 desktops, 17 TV screens, and 20 printers donated to us by **Vodacom Tanzania Foundation** (VTF) and 100 routers donated by **Basic Internet Foundation**. These devices empower both educators and learners, enabling interactive engagement and in-depth research. Through this comprehensive approach, we aim to stimulate curiosity, foster critical thinking, and elevate academic excellence, thereby ensuring a comprehensive and profoundly impactful educational journey for every student.

Our commitment is centered around enhancing the quality of learning experiences by providing essential internet access. We are dedicated to connecting Tanzanian public schools, ensuring they have the means to access a diverse range of educational content. The internet serves as a gateway to a multitude of learning materials, which in turn deepens the comprehension of subjects.



KPI 3: IMPROVE TEACHERS AND STUDENTS DIGITAL CAPABILITIES

In response to the prevailing lack of digital skills among teachers and students in Tanzanian public schools, we are committed to comprehensive digital skills training. The challenge of effectively teaching Information and Communication Technology (ICT) in schools has led to a notable skills gap. Our initiative focuses on empowering teachers with essential ICT competencies, enabling them to effectively teach these skills to students. We have successfully trained 1000 teachers and 9300 students across 101 connected schools both in (Tanzania Mainland and Zanzibar). This integration of technology and training is pivotal to enhancing digital literacy in Tanzanian public schools.

Our training aligns seamlessly with the Tanzanian ICT curriculum, catering to teachers' needs. These programs equip educators with vital digital skills for project implementation and long-term sustainability, directly supporting educational standards. The acquired skills extend beyond resource utilization, enabling teachers to seamlessly integrate technology into teaching methods. This cultivates interactive learning experiences, fostering digital literacy in students and preparing them for a technology-driven world.





KPI 4; DIALOGUES AROUND MEANINGFUL CONNECTIVITY

In our commitment to advancing meaningful connectivity within Tanzanian public schools, we emphasize the importance of facilitating productive discussions among various stakeholders. These dialogues play a pivotal role in shaping policies, addressing challenges, and optimizing the impact of our initiatives. Through active engagement with government bodies, international donors, educators, policymakers, parents, and students, our goal is to promote collaborative conversations centered around meaningful connectivity. These dialogues serve as a platform for sharing insights, exchanging best practices, and collectively working toward equitable access to educational resources.

To amplify our impact, we encourage educators to exchange insights and challenges in integrating technology through workshops and forums. We involve policymakers to advocate digital literacy integration in education strategies, aligning with national goals for equity. These dialogues aim to foster mutual understanding, forge partnerships, and drive sustainable change, fostering an inclusive environment for learners to thrive in the digital age.

CHALLENGES

There were several encounters that were confronted during the project implementation in the Phase III and these include:-

Limited ICT curriculum:

One of the main challenges we encountered was the absence of ICT as a registered subject in the curriculum of the public schools we worked with. As a result, students lacked a foundational understanding of computer usage and digital literacy. This knowledge gap hindered their ability to effectively engage with technology for educational purposes.

Inadequate ICT infrastructure:

Another significant challenge was the absence of ICT labs in several schools. The lack of dedicated spaces equipped with computers and necessary technology tools hindered students' access to hands-on computer learning experiences. Without proper infrastructure, it was difficult to introduce practical computer skills and utilize digital resources effectively.

Shortage of qualified ICT teachers:

Some schools faced a shortage of qualified ICT teachers. This shortage limited the availability of professionals who could effectively guide students in their ICT learning journey. The absence of dedicated ICT educators meant that students did not receive specialized instruction tailored to their learning needs and missed out on valuable insights and guidance.

Connectivity issues:

In certain areas, schools faced challenges with internet connectivity. Unstable or unreliable internet connections limited the access to online educational resources and hindered the potential for collaborative learning, research, and information sharing. The lack of reliable connectivity prevented students and teachers from fully harnessing the benefits of the digital world.

ACHIEVEMENTS:

The success of this project phase provided the following achievements.

01

Training Sessions on Digital Skills

We successfully conducted 101 training sessions on digital skills for teachers and students in 101 schools. Through these sessions, we directly trained 1000 teachers (ICT & non-ICT teachers) and 9300 students. This comprehensive training has significantly contributed to improved performance by introducing new teaching and learning methods. It has also enhanced access to a wider range of information and resources, transforming education and aligning with the Sustainable Development Goals.

02

Strengthened Cooperation with Authorities

Our field team successfully strengthened cooperation with regional and local government authorities, along with our digital partners. This collaboration ensured smooth project operations and fostered a sense of project ownership within the community. By working closely with relevant stakeholders, we have established a solid foundation for sustainable implementation and long-term impact.

03

Establishment of ICT Labs

We have successfully launched over 80 new ICT labs in hard-to-reach communities, ensuring accountability and efficiency in teaching and learning through ICT tools. These labs serve as dedicated spaces equipped with the necessary technology for students to engage in practical, hands-on learning experiences. The establishment of ICT labs has bridged the digital divide and empowered students with essential digital skills.

ACHIEVEMENTS:

04

Easy Access to Educational Content

Through the introduction of platforms like E-fahamu, we have created easy access to educational content. Both students and teachers now have a centralized hub for curricular and extra-curricular materials. This initiative has enhanced learning outcomes by providing a convenient and comprehensive resource for educational materials.

05

Policy advocacy

Championing transformative policy shifts concerning the integration of ICT into secondary school education, our efforts encompass strategic engagements with the Ministry of Education. This collaborative approach seeks to drive progressive change, establishing a solid foundation for enhanced teaching and learning through the seamless incorporation of modern technology

06

ICT Subjects Registration

Our dedicated efforts yielded successful outcomes as we collaborated with schools to ensure the registration of I.C.T subjects. This strategic move significantly enhanced students' access to essential computer skills, subsequently smoothing the path for the seamless integration of digital learning into their academic experience. The proactive approach of promoting I.C.T subject registration has undeniably strengthened the groundwork for students to confidently embrace digital education

BEST PRACTICES

Recruiting of monitoring assistants

Skilled monitoring assistants, selected for their competence, play a pivotal role as digital friends in connected schools. Their careful recruitment, emphasizing skills and dedication, ensures effective data collection and on-the-ground insights. These individuals contribute significantly to project progress assessment and improvement identification. Their involvement enhances monitoring, facilitates comprehensive data collection, and aids in evaluating the project's effectiveness, shaping future initiatives for success.



Selecting the technical assistant team

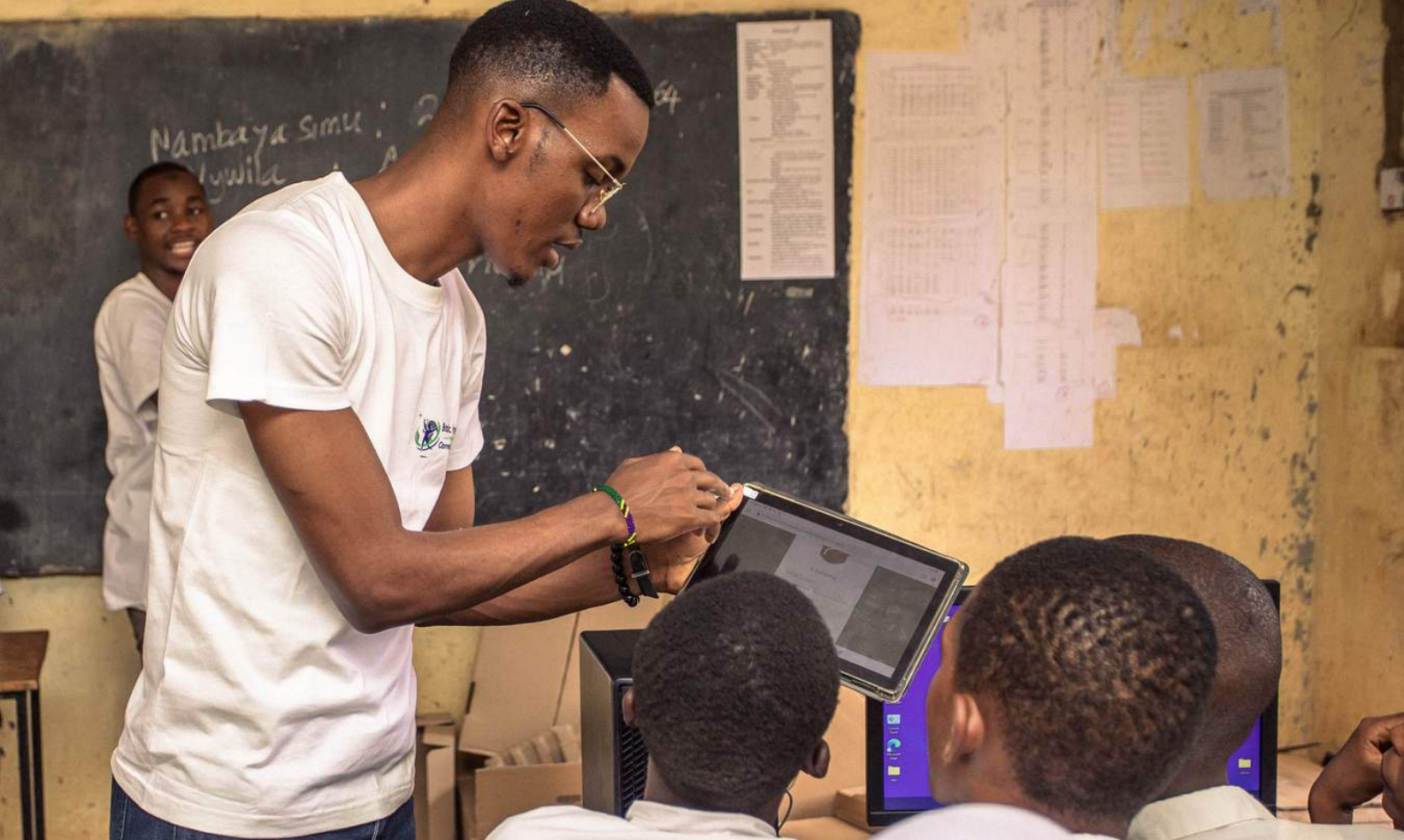
For efficient problem-solving within the project, we formed a dedicated Technical Assistant Team, consisting of members from UDSM, DIT, and ATC, under the IT & Training department. This specialized team addresses reported issues promptly, utilizing its expertise in troubleshooting. The Technical Assistant Team analyzes collected data to identify key challenges, facilitating timely and effective solutions. This approach ensures the smooth progress of the project, minimizes disruptions, and upholds its successful implementation.



Collaborative Efforts and Efficient Execution

In our market activation campaign, we aimed to raise awareness and register students and teachers on the E-fahamu platform across 300 schools in diverse regions of Tanzania. To achieve this efficiently, we fostered collaboration, involving the ACP team, University students from DIT, ATC, UDSM, and Digital friends. Our collective efforts streamlined the activation process, resulting in remarkable success as we successfully covered all 300 schools within just three weeks.





IMPACT IN NUMBERS:

9,300+

Student beneficiaries reached by the project in the 146 schools connected

1,000

ICT Teachers trained on the use of ICT in teaching and learning for their students.

101

Schools reached in over 18 regions, country wise and in Zanzibar island

482

Devices donated include: 145 tablets, 101 routers, 204 desktop computers, 17 Tv screens and 20 printers.

80+

New ICT Labs in hard to reach communities.

PRIORITY SDG'S:

The School Connectivity Project aligns with the United Nations Sustainable Development Goals (SDGs). Our commitment to these SDGs is reflected in our efforts to enhance education quality, foster economic growth through technological advancements, and contribute to the development of robust infrastructure and innovation in the education sector. These goals are;



SDG 4: Quality Education

Our project advances SDG 4 by ensuring quality education for all in Tanzania. Through internet connectivity, digital skills training, and resource provision, we empower teachers and students, enabling equitable access to modern learning tools and fostering lifelong learning opportunities.



SDG 8: Decent Work and Economic Growth

Decent work and economic growth: provision of the internet and digital capabilities has triggered access to information and economic opportunities to communities on the ground, the project has created decent work by providing employment to youth and women



SDG 9: Industry, Infrastructure and Innovation

Our initiative strongly aligns with SDG 9 by bridging the digital gap in Tanzanian public schools. Through widespread internet access, technological resources, and digital literacy training, we are fostering innovation and infrastructure development, ensuring equitable and sustainable educational progress.

LESSON LEARNT:

ADVANCING THE EDUCATION SYSTEM



There is still a lot that needs to be done in advancing Education system in Tanzania and all teachers, not only ICT teachers, need to be equipped with ICT knowledge on teaching and learning of students so as to be competent in taking the students through using ICT in learning. Still ICS subjects are treated as optional subjects but this is also due to lack of ICT devices such as (computers, TV screen, Projectors) and electricity in most schools located around rural Tanzania.

SUSTAINABILITY AND PROJECT OWNERSHIP

If schools are not informed on how they can make the project sustainable then at the end of the day the beneficiaries still become dependent on donors and in the end most projects do not reach their full potential. During selection of schools it is very important to select schools in the same district and later expand gradually, so as to ensure smooth project operations and easy way to conduct M&E activities by digital friends. In doing so we will reduce the travel costs. When conducting a need assessment or baseline survey it's important to collect informative data on the schools location, type of computers available in the school and network available in the school premises.



Acknowledgements

We would love to extend our heartfelt gratitude to individuals who have made this amazing work possible through their intellectual participation, material donation, and some who even went a step further in accompanying us in implementation of the School Connectivity activities. Below, is the list of their names/ Organizations:

TECHNICAL UNITS

• UDSM Technical Team

Focal Persons

Dr. Baraka Maiseli
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Dr. Godwin Mruma

Students Representatives

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• Dar es salaam Institute of Technology (DIT)

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Students Representatives

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• Arusha Technical College (ATC)

Focal Persons

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Sunday Fue

Students Technicians and Trainers in the Departments of Information Communication and Technology

PROJECT MONITORING UNITS

- Zainab Said
- Joachim Milambo
- Simon Ndallu
- Frank Kisa

DIGITAL FRIENDS

- Zainab Said **DF KILIMANJARO** (She is connected).
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- Richard Temba **DF SINGIDA** (Sustainable Environment Management Action).
- Simon Ndallu **DF LINDI** (Asasi ya kuunganisha vijana kimaendeleo Ruangwa).
- Amalath **DF MWANZA**
- Clever **DF MOROGORO**
- Frank **DF SONGWE**
- Ibrahim **DF TANGA**
- Ignas **DF RUKWA**
- Jonathan **DF MANYARA**
- Joram **DF NJOMBE**
- Josephat **DF GEITA**
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- Salma **DF UNGUJA**
- Salome **DF SONGWE**
- Salum **DF PWANI**
- Simon **DF LINDI**
- Joachim **DF TABORA**



Dear Contributors,

We extend our deepest thanks to each and every one of you for your invaluable contributions. Your support is the driving force behind our mission, and it is truly appreciated.

Together, we are making a positive impact and your generosity is the cornerstone of our success.

**We thank you for your continued support in building
"Transformed Communities"**

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