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School Connectivity Project

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About African Child Projects.

African Child Projects was founded in Feb 2018 as a project under the European Union (EU) under the umbrella of Chamwino Arts Center (CAC). Later on, it was registered as an NGO in 26th August 2019 with registration number 00NGO/R2/000476 and maintains a Head Office in Dar es Salaam Region at Light industrial area NAFASI ART SPACE. We work on projects in the category of:

Technology (By bridging the digital divide and bringing internet access to communities of Tanzania)

Education (By advocating for quality education in school, installing internet infrastructures, building community library in resource constrained communities)

Sustainable development in rural communities.

Catherine R. Kimambo is CEO and represents Basic Internet Foundation in Tanzania

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School Connectivity Pilot project.

- The School Connectivity ("SchoolConnect") project aims at connecting a minimum of 10 schools in its first phase and establishing sustainable models for school connectivity in Tanzania.
- The pilot is designed to contribute to the worldwide effort for school connectivity, mapping of all schools and will answer the demands in resource constraint environments.
- Contribute in achieving the 5th Government connectivity target that aimed in delivering connectivity to some primary schools and to ALL secondary schools to benefit digital education.

Goal and Objectives.

Goal:

Mapping, connect and ensure free access to educational contents in 10 schools from 10 regions in Tanzania.

General Objectives:

To create sustainable model for school connectivity and offer free access to educational content at the end of the project.

Specific Objective:

- To offer free digital educational contents in secondary Schools.
- Reliable service provider in schools.
- Installing internet infrastructures in school.

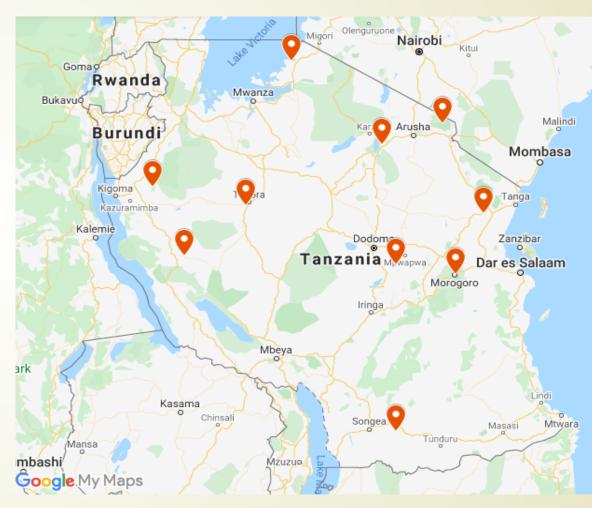
 School Connectivity



Catherine R. Kimambo 27 Aug 2020 Julius Nyere High School in Migoli

Target Area / School Selected

- Musoma Tech Secondary School Musoma
- Morogoro Secondary School Morogoro
- TPC Secondary School Kilimanjaro
- Chamwino Secondary School Dodoma
- Embøret Secondary School Manyara
- Cheyo Secondary School Tabora
- Kigoma grand High School Kigoma
- Mbamba bay Secondary School Nyasa
- Mizengo Pinda Secondary School Katavi
- Kiomoni Secondary school Tanga



Justification for the Selected Schools

- Schools meet minimum requirement such as availability of computing devices, reliable electricity, security of the equipment, etc
- Established local community supporting connectivity

Implementation Plan.

The total project will last for 16 months. During an initial phase of 8 weeks (2 months), we will establish connectivity of schools. In conjunction with connectivity, we will conduct training and workshops with the teachers and students on the digital learning platform.

Having established connectivity, the schools will run sponsored for 12 months, and then gradually take over the costs for Internet connectivity.

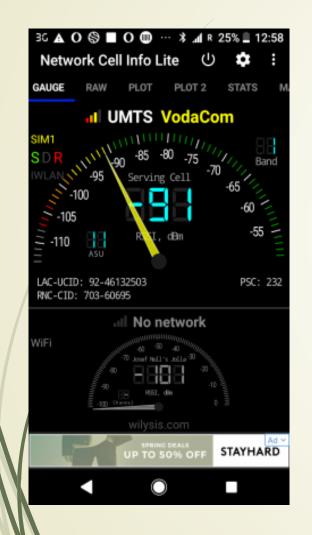
Regular feedback will be established and shared with the stakeholders to ensure:

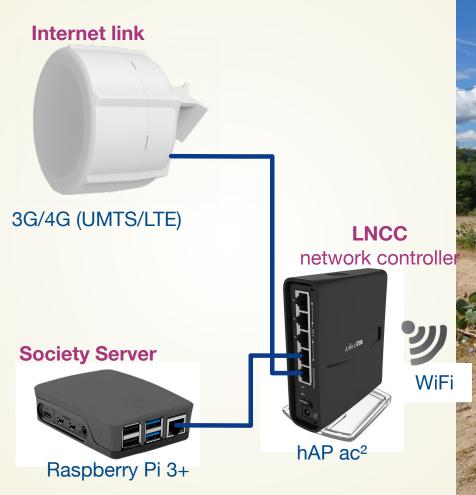
- further development of the school educational platform,
- reporting both nationally as well as internationally,
- establishing of «lessons-learned» for a scale up towards a national strategy.

Project Partners undertaking the First Phase

- Basic Internet Foundation
- UCSAF
- tiGo Tanzania
- Vodacom Foundation
- TTCL
- UNICEF
- Shule Direct
- African Child Projects

Technology to be Used.







Our Theory of Change.

- 1.Offline installation of SHULE DIRECT materials.
- 2. The use of digital friends.
- 3. Community engagement
- 4. Separation between:
- ✓ Lightweight contents (This will provide good user experience, and needs only little mobile data such as text and pictures).
- ✓ Heavy weight contents (By adding a local server to the Info Spot at the schools allows the hosting of education-specific broadband content, such as videos.)
- ✓ And restrict what can be accessed (YouTube, dark web)

Budget.

Table 1 - School Connect: High Level Budget

	dedicated task	# of units	unit cost [USD]	total(TZS)	total [USD]	covered by	
E	Equipment ("InfoSpots") for 10 schools	10	400	9,300,000.0	4000	BasicInternet	
E	Configuration equipment	10	500	11,625,000.0	5 000	BasicInternet	
0	Shipment to TZ	1	500	1,162,500.0	500	BasicInternet	
0	Import tax TZ	1	1 400	3,255,000.0	1 400	UCSAF	
P	Installation costs on site	10	900	20,925,000.0	9 000	UCSAF	
E	3 Tablets per school	40	90	8,370,000.0	3 600	Vodacom/TIGO/TTCL	
E	SIM cards with 10GB/month package for 1 year	10	180	4,185,000.0	1 800	Vodacom/TIGO/TTCL	
P	Interviews and training at schools/Follow-up	10	300	6,975,000.0	3 000	Vodacom/TIGO/TTCL	
	Total costs for SchoolConnectivity		Sum	65,797,500.0	28 300		

co-sponsored by Basic Internet (Norway), UCSAF (TZ), Mobile Operators (TZ)

Sustainability.

- Establish local community network cooperative societies for the technical sustainability
- Expand the school connectivity to communities around schools who will pay for Internet access after school hours
- Leverage the ujamaa concept where one person can pay for the Internet access to benefit the large community including schools
- Encourage the establishment of economic generating activities for the established cooperative to later fund the connection.

Target: operational costs of less than TZS 30.000/month for each of the pilot schools

Nation-wide roll-out: 4885 schools * TZS 10.000/month = TZS 48 850 000/month

School Connectivity Catherine R. Kimambo 27Aug2020

Case studies - Ethiopia

Addressing the need

- School connectivity in Ethiopia
 - Total Project: connect all schools
 - Phase 1: 3.500 secondary schools
 - 6 months time frame, 35 Million USD
 - Phase 2: all secondary schools
 - time frame 2020-2022
- Norway's share
 - Connect 500 secondary schools
 - 45.950 NOK, 1 year project
- Collaboration & Innovation
 - Competence building
 - Local deployment (Univ. & IBA Ethiopia & local ground)
 - Community empowerment (re-using)





@Basic4all



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Ministry of Education Federal Democratic Republic of Ethiopia



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Innovation Norway Oslo, Norway

Subject: Financial Support for Digital Interconnection of Ethiopian Secondary Schools

Currently more than 26 Million students are in School in Ethiopia in more than 46 thousand Schools in the pre-Primary, Primary and Secondary level classes. Among these large number of Schools, Schools connected to a bear 2Mbps Internet connectivity is less than 500 in number. It implies that these young generation is being brought up in non-digital Schools in a Digital Age.

The Ministry of Education has now decided to change this through implementation of two Phases. Phase one is provision of 300Mbps Internet connectivity to the 3500 Secondary Schools within a time period of 6 months at an estimated Budget amount of 35 Million USD. The Second Phase is to be implemented over two years and is set to interconnect all the remaining Primary and Pre-Primary Schools at a minimum of 50Mbps speed. The Budget requirement for the Second phase is yet to be worked out.

The Educational Network Connectivity is going to be exclusively used for Educational and governmental Services and once installed will provide free internet services to the 3500 Secondary Schools and other government offices.

This is, therefore, to kindly request your good office to financially support the first phase of this Project and be part of the digital transformation in the Ethiopian General Education Sector.

or.ing. Getahun Mekuria Minister

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Key Performance Indicators.

- Easy access to contents by students.
- School connected with Internet services
- Improved teacher capabilities
- Digital empowerment of pupils, prepared for decent work

Monitoring and Evaluation.

- The monitoring and evaluation team will include members from the:
 - President's Office Regional Administration and Local Government,
 - Ministry of Education, Science and Technology,
 - Ministry of Works, Transport and Communication,
 - the University of Dodoma, Internet Society Tanzania Chapter and
 - Tanzania Community Networks Alliance.

Team.

- Installation and IT support:
 - 1. Shule Direct IT for software installation in schools.
 - 2. African Child Project IT for the installation of infrastructures.
 - 3. Basic Internet Foundation (NO) for technology support
- Coordinating team: Two people who will be responsible for implementing, monitoring and evaluation and oversee the pilot phase.
- Photographer: One person who will be responsible for taking pictures and short films for reports.

Risks and Mitigation.

N.	Assumption and Risk	Level	Mitigation or Solution
1.	Being Misled / Misinformed	Medium	Change the school immediately within a region
2.	Stolen of devices	Low	Report police and request another if possible
3.	Under Budgeting	Low	Cut down unnecessary cost
4.	Member of the team dropout	Low	Find replacement immediately
5.	Donor pull out	Low	Inform others so as to cover the rest of the cost
6.	Poor cooperation from teachers	Low	Report to the ministry
7.	No connection access / Electricity	Low	Change the school immediately within a region
8.	Student performance not improved	High	

Scale up.....

- Make school connectivity a national strategy by mapping and connecting all secondary schools in Tanzania
- Establish the sustainable business model for connecting all schools in TZ
- Creating the show-case for rural connectivity

Conclusion

- School Connectivity project
- 10 schools selected across the country
- Multi-dimensional team: NGOs, Government, Mobile Operators, Content Providers, Internet Society
- Focus on sustainability of operations (OPEX), target costs TZS 30.000/month
- Scalability for the National Roll-out, OPEX target TZS 48 850 000/month for all 4885 schools
- Showcase for digital empowerment, knowledge for the digital age