YOUTH LEAD

Tanzania

Case Study

ICT

as a livelihoods program strategy

by Vick John Vigero | November 2019
ABOUT YOUTH LEAD & THE LIVELIHOODS CASE STUDY SERIES

A primary goal of the Youth Lead program’s first phase, implemented by the International Youth Foundation (IYF) with support from Irish Aid, was to develop meaningful youth livelihood program models and engagement practices through a youth-led research and co-design process. This goal was achieved through a research and leadership-focused fellowship program (Kiongozi Fellowship), complemented by field research conducted in three regions of Tanzania.

The Kiongozi Fellowship was a six-month program that engaged young people as partners in research, program design, and strategy development. The 2019 Fellows (five women and four men) ranged in age from 23 to 27 years old and represented seven regions of Tanzania. Over the course of the fellowship period, Kiongozi Fellows conducted primary and secondary research to develop case studies on specific livelihoods program strategies and provide recommendations on youth engagement. Their work included a combination of examining existing youth livelihoods programs, collecting data and statistics to better understand the livelihoods context in Tanzania, interviewing key stakeholders, and leading focus group discussions with other young people to gain additional perspectives and insights.

This is one of nine case studies, each of which focused on one of the following program strategies: access to health care, career fairs, career guidance, entrepreneurship training, information & communications technology (ICT), life skills training, peer networks, social entrepreneurship, and vocational training. Each of these types of interventions can play a critical role in supporting young Tanzanians in their journey to sustainable livelihoods.
BACKGROUND

Over the last three years, Shule za Kata, an information, communication, and technology (ICT) project for young people in secondary schools, showed how important ICT skills are for young people. The use of ICT has gone on to increase employability, and ICT has become an important way to gain information. The program particularly showed that there is a need for young people to have this skill in their day-to-day life.

ICT refers to technologies that provide access to information through telecommunications. It is similar to information technology (IT), but focuses primarily on communication technologies. This includes the internet, wireless networks, cell phones, and other communication media.

The use of ICT in Tanzania is not entirely new: ICT skills enable youth to be able to be technologically advanced and make them pursue most of the daily tasks in their lives without difficulty. Young Tanzanians are able to compete in the job market and also access any simple technology-related device without fear or surprise about how it is used or operated. This strategy places innovative tools in the hands of up-and-coming youth. In terms of applying their assets and capabilities, young Tanzanians have already begun prototyping, creating services, designing apps, and creating simple machines to access electricity, water, and transport.

ICT has played a huge role in assisting people to cope with today’s world and making things run faster in terms of introduction to machines and robots, but the challenge comes when young people are unable to access or operate ICT devices in this century.

The Challenge

Digital tools can facilitate productivity, but not all age groups and cultures are familiar with the particular functions of a mobile phone or the internet. In order for youth to access ICT there is a need to have connectivity, which enables them to have internet access and be able to browse, search, and use social media. But there is an unreliable supply of electricity for those who need to implement ICT skills projects in Tanzania, specifically for those living in rural areas. For those youth in urban areas, the challenge lies in being able to afford the fees to take ICT courses or a smartphone or laptop, particularly for those of lesser socio-economic status and females who have to depend on parents or partners for these funds and resources.

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The sustainability of ICT learning is uncertain for those who gain it. Young people may be trained on these skills, but the challenge arises when they don't own a laptop and cannot practice after being trained. Even if the other barriers to access have been resolved, socio-economic and cultural issues, such as gender discrimination or attitudes about people with disabilities, impact the effective use of ICT. A 2015 study found that women globally are 14% less likely to own a mobile phone than their male counterparts, and over 1.7 billion women in low- and middle-income countries do not own mobile phones.³

The Solution

ICT plays a role in making sure young people are able to keep up with today’s digital world that requires more than the formal knowledge gained in schools. ICT hubs and labs have been established to provide ICT trainings to support young people from urban and rural areas. These trainings provide soft ICT skills, like how to use a mobile phone, MS office programs, the internet, and social media. The trainings also provide hard ICT skills like photography, video making, computer programming, and computer maintenance, which provide skills for both males and females to become employed or self-employed.

ICT hubs, labs, incubators, and government support play a great role in making this strategy a success and enabling young people to have ICT skills at their fingertips. This can be seen by Badiliko Digital Hub, which has been able to reach over 40,000 students in digital and learning access by establishing computer learning in schools.⁴ The outcome of ICT as a strategy is to make sure all youth are able to become ICT literate, find jobs, or become self-employed, and ensure they can apply ICT skills in their day-to-day lives. Additionally, in the program examples below we can see that some initiatives, like the Asikana Network, specifically seek to enhance women’s participation and provide female role models to young women interested in these skills and careers. According to a recent report on ICT hubs in Tanzania, most hubs acknowledged that they would like to have more female users and were keen to do more in that regard. Sixty-five percent (65%) had already taken some action to bring in more women, and 70% had taken concrete action to make sure girls and women feel safe coming to the hub. Only 25% of the hubs had a gender policy. Thirty-five percent (35%) of the hubs said they make a point of engaging female staff and facilitators to provide role models for women and girls.⁵

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Theory of Change: ICT Programming

<table>
<thead>
<tr>
<th>Activities</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Implement practical learning, rather than theoretical, for young people to understand clearly through practice by either using a computer, tablet, or phone</td>
<td>• Young people are able to learn ICT skills easily and understand their application</td>
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<tr>
<td>• Increase number of computers in schools to reach more students in ICT learning</td>
<td>• Young people are able to find technology jobs</td>
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<tr>
<td>• Create more ICT co-working spaces to enable physical learning</td>
<td>• Young people are able to reliably access spaces for learning and applying ICT</td>
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Assumptions

• Young people are ready and willing to learn ICT skills
• Young people are able to adapt to ICT learning in schools
• There is sufficient electricity for the computers, they work properly, and teachers can show students how to use them
• Young people are able to get to ICT spaces and they are able to practice ICT skills at these places

NOTEWORTHY ICT PROGRAM EXAMPLES

Organizations that implement this strategy have explained how accessing resources such as computers and a working space makes it easier for the implementation as this strategy needs practical learning more than theory.

Asikana Network, 2011 - Present

<table>
<thead>
<tr>
<th>Key Partners</th>
<th>Organization Overview</th>
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</thead>
<tbody>
<tr>
<td>Bongo Hive, Zambian Information and Communications Technology Authority,</td>
<td>Asikana Network is an organization that seeks to increase the meaningful participation of women and girls in technology. They provide free training in marketable ICT skills, exposure to emerging technologies, mentorship, networking, and career progression opportunities. They exist to create a community of confident and capable women through technology.</td>
</tr>
<tr>
<td>Zambian Ministry of General Education, Tech Women Alumnae of South Africa,</td>
<td></td>
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<tr>
<td>Tech Women of Zimbabwe, Lubuto Library, Chiparamba Breakthrough Academy,</td>
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<tr>
<td>University of Zambia</td>
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<table>
<thead>
<tr>
<th>Key Activities</th>
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<tbody>
<tr>
<td>• Run classes in social media management, photography and graphic design, and mobile and web classes</td>
<td></td>
</tr>
<tr>
<td>• Organize and host partnership events where the ladies get to learn from mentors</td>
<td></td>
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<tr>
<td>• Offer life skills training as a complement to other programming and events</td>
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</tbody>
</table>

Target Beneficiaries

Asikana operates in Lusaka, Zambia. Programs are implemented in urban areas, where the organization targets girls who are in high school, as well as girls in colleges and universities.
### Asikana Network (continued)

**Community Perspectives**

"The program has helped young girls to take opportunities in the ICT sector in Zambia and has brought transformation to their mindsets and allowed more girls to take upon ICT skills."

- *Regina Mtonga, Asikana Network Co-Founder*

"My parents and community are proud of the young woman I have grown up to be and I am becoming and I owe my thank you to the Network. I am beyond grateful for this powerful system of women which challenged me in mindset, equipped me with new skills and awarded me with knowledge. Asikana Network has truly changed my life."

- *Abigail Shachinda, Asikana Network Member*

"Being part of Asikana Network has been very beneficial to me in that it has helped gain a lot of confidence in the journey as a female in ICT. It is also with Asikana that I learnt how amazing it is really to impart knowledge voluntarily; it has been the foundation for most of the work I have been doing in the recent years."

- *Nancy Mutachila, Asikana Network Member*

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### Buni Hub, 2014 - present

<table>
<thead>
<tr>
<th><strong>Key Partners</strong></th>
<th>Dar Teknohana Business Incubator, Commission of Science and Technology, Human Development Innovation Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organization Overview</strong></td>
<td>Buni Hub aims to discover, nurture and mentor youth to develop innovative technological solutions to problems facing Tanzania. They foresee a generation of technology geniuses and young people designing scalable projects to address community challenges.</td>
</tr>
</tbody>
</table>
| **Key Activities** | 1. Internship Program  
2. Mentoring program (Pre-Incubation Program)  
3. Communities Program  
4. Fabrication Laboratory |
| **Target Beneficiaries** | The organization is based in Dar es Salaam, Tanzania. They target young people, both male and female, enrolled in high schools and universities in urban areas. |
| **Community Perspectives** | “The program has been built for the community and many young people have been able to take advantage of the different opportunities that the space has provide in terms of pitching challenges, technology boot camps and hackathons.”  
- *Buni Hub Founder*  

The space helps users create, innovate, and prototype: “This is a space with a conducive environment for building and nurturing young entrepreneurs with unending new challenges flowing and opportunity to make through.”  
- *Buni Hub User* |
Capital Space Tanzania, 2018 - present

<table>
<thead>
<tr>
<th>Key Partners</th>
<th>Project Inspire, Sahara Ventures, Seed Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization Overview</td>
<td>Capital Space aims to be an ICT space that offers young people in the central zone of Tanzania a co-working space that allows them to innovate, co-create, ideate, and receive mentorship.</td>
</tr>
<tr>
<td>Key Activities</td>
<td>In addition to promoting STEM education, Capital Space offers: • Technology and skills development • Mentorship program • Innovation and Entrepreneurship training</td>
</tr>
<tr>
<td>Target Beneficiaries</td>
<td>Capital Space focuses on young people from 15 to 35 years of age in urban areas, including students at secondary and university level, as well as young people with disabilities.</td>
</tr>
<tr>
<td>Community Perspectives</td>
<td>“We are thankful for having positive feedback from young people and to be able to offer the co-working space as there was a gap in Dodoma to solve community challenges through the use of ICT.” — Capital Space Manager “I had always wanted a space where I can brainstorm ideas and work on technology projects. When I was living in Dar es Salaam I had a space that offered me such services, and I was glad to find it in Dodoma.” — University of Dodoma Student</td>
</tr>
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**What Works in ICT Programming**

**Access to physical assets:** Looking at the organizations that implement this strategy, they have explained how having resources such as computers and a working space makes it easier for implementation, as this strategy requires practical learning rather than theory. This can work in one of two ways: organizations can have access to computers at their space, or beneficiaries can have computers/smartphones that they bring to the program to use.6

**Up-to-date curriculum:** People no longer want to just have administration skills and be trained on Microsoft Office, but prefer to be taught on the currently-needed ICT skills, such as coding to make apps, websites, and blogs, which is what can be seen in most of the programs that implement ICT-related content. This helps young people compete in the employment field and also increases the digital economy in Tanzania.

**Partnerships:** To be able to run this program you need to have partners that will be able to work with you in terms of financing events, capacity building, and community engagement. These partners often come from non-governmental organizations providing capacity building, national government agencies

6 Focus Group Discussion (FGD) participants also raised this as the key point to have practical learning.
enforcing the ICT policy, and other community-based organizations (CBOs) in ICT fields that support ICT enhancement in Tanzania.

**Practical learning:** This is the most crucial need for young people to understand more and grasp quickly. It is easier for a young person to understand when they learn by doing as they are able to have effective learning, to be able to achieve implementing ICT this is the most important factor that will lead to positive impact to young people.

**Friendly environment:** ICT skills need to be gained in a quiet environment because practicing them requires concentration and a peaceful mind to be able to adapt quickly.

**Qualified teachers/trainers:** On the case of ICT in schools, young people have mentioned that while attending an ICT course there is not enough effort or seriousness put by teachers on how ICT will be used after completion of their studies. Teachers often cram the theory, so students pass the examination, but in the end, students are unable to apply this knowledge practically. Having qualified and passionate teachers/trainers will help to make sure that young people acquire both knowledge and the ability to apply it practically. Sixty percent (60%) of FGD participants pointed out there was a lack of qualified trainers/teachers in schools and organizations; according to one FGD participant, “they have only undertaken three months course on ICT and expect to train young people on concrete learning.” The Government of Tanzania has developed an ICT scheme of service for ICT cadres, however there is a real shortage of qualified ICT professionals compared to actual demand, and their profiles are not well defined and established.7

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WHAT DOES NOT WORK IN ICT PROGRAMMING

Young people prefer to gain both ICT skills and other skills in collaboration to be able to familiarize
themselves with more than one skill after attending the program. This is a gap which is weak in this
strategy and needs to be addressed in an ICT program that targets young people.

This strategy lacks enough mentors, teachers, and trainers who are able to facilitate young people's
innovations or help them grow their ideas into something tangible. The underlying cause of this is that
teachers lack positive perceptions, which leads to poor delivery of ICT. A young person from the focus
group discussion mentioned that it would be helpful from the early stage of a child to be equipped with
ICT innovation mindset which will assist in creating more young people with solution-based projects that
can increase the country's economy and solve some of the community challenges.

This strategy lacks a curriculum that is comprehensive enough for a person to benefit from what they
have been trained on, and for young people to use what they have gained in their lives for basic
knowledge and income generation. Therefore, a program that will be designed for young people in ICT
should be inclusive, comprehensive and favor both genders to have a meaningful positive outcome for
them.

Structural and Procedural Barriers

Youth livelihoods require more than individual capabilities and assets–outcomes are also affected by
macroeconomic policies and social and political structures influencing individual agency or mobility.

1. **Theoretical learning:** Young people feel that theory in ICT skills is not impactful for them to
   understand at all as it is book-based rather than practical, actual, hands-on learning by doing.

2. **Socio-economic status:** Young people have highlighted how most Tanzanians are coming from
   low-income families. Therefore, when it comes to gaining ICT skills it's a challenge, as it is expensive
to buy ICT equipment like mobile phones, computers, radios, cameras, etc. and to attend ICT
courses.

3. **Female participation:** There is still a need to increase the number of participating females, as they
   have barriers such as getting their own income, gender disparities in education, and reproductive
   health pressures. The socio-economic status hampers women in agriculture as well as in business. On
   the supply side, there are few gender-sensitive financial services and, on the demand side, lack of
   information and awareness among women. The gender gap in financial inclusion is narrowing, largely
   because of the growth of mobile money.  

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8 Iffat Idris, “Barriers to women’s economic inclusion in Tanzania,” GSDRC, University of Birmingham,
https://assets.publishing.service.gov.uk/media/5b432d9e40f0b678bc5d01ct/Barriers_to_womens_economic_inclusion_in_Tanzania.pdf, 23 May 2018.
WHY LIVELIHOODS PROGRAMMING IN TANZANIA SHOULD USE ICT

I was able to train 145 university students on ICT skills, and they confessed that these are some of the skills they lack in their lives because some of them wish to start businesses, grow their careers, or get information, but they have little knowledge on how to use ICT to meet their needs. The training aimed for young people to use ICT for development whereby they can use it in conjunction with their studies, but also think of how it can help them become employable and self-employed.

This showed how many young people need to have this skill and use it to upscale their lives. ICT hubs and labs in Northern zone (Kilihub), Lakezone (Elimulabs), Central zone (Capital Space), Southern zone (Mbeya Lab, KiotaHub), and Coastal zone (BuniHub, NdotoHub, Seed Space, etc.) have been established, so they are already growing in different parts of Tanzania. They have been successful in accommodating both male and female young people in gaining ICT skills, but there is a need to establish more of these hubs and labs that young people can access in their regions where the cost is lower.

HOW ICT PROGRAMMING SHOULD BE TAILORED TO THE TANZANIAN CONTEXT

There should be a way to consider both males and females in ICT livelihoods program strategies. Although programs like Apps and Girls, She Codes for Change, and Buni Divaz have been ambassadors for female participation in ICT, more females need to be reached in different parts of Tanzania as some feel it is an industry that is male dominated, that there is lack of interest in them participating, and that they need permission from their fathers/brothers/uncles to take on ICT learning.

In Tanzania it was reported that 86.32 % of young people were self-employed in 2017, according to the World Bank collection of development indicators; thus, integrating entrepreneurship and ICT would lead to a better turnout of young people to bridge the unemployment rate. This can be seen in the Buni Hub strategy to incorporate both ICT and entrepreneurship.

Some ways to consider on how ICT should be tailored to the Tanzanian context:
● Government support in renting spaces for young people who want ICT hubs/labs in their regions.
● Young people to be able to source out any means to access ICT devices for rental to be able to practically learn.
● Partnering with other local ICT programs for capacity building and experience sharing will strengthen the ecosystems.

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10 For example, according to “A Mapping of Tanzanian Hubs and Innovation Spaces,” COSTECH’s vision is to transform Buni into a model “Hub of Hubs,” creating a central node that can offer support to other hubs, labs, and innovation spaces nationally.
To be able to have young people leading the ICT hubs and labs with support from adults.

**Geographical location:** It is said that most of these ICT related programs to be prioritized first in the urban areas, as there is a population of youth that need these skills to be able to access information and jobs and to learn new skills.\(^{11}\) It will be easier for young people to access the resources in urban areas than rural areas because there is electricity,\(^{12}\) whilst some say it is better to focus on rural areas as they lack the ICT knowledge.\(^{13}\) With this mentioned, there is a need to consider having supporting infrastructure in rural areas to bridge the gap to reach them as well.

**Friendly cost:** Young people are willing to gain ICT skills, but they prefer the livelihood program to cover the cost. Depending on Tanzanian lifestyle, rentals of computer equipment would be a great way to make ICT cost effective for young people.

**Simple language:** The language of the ICT curriculum should be simple and easy to understand and if possible, to be in Swahili language.

**Adequate ICT resources:** If the program offers practical learning then there must be enough resources, like computers, to be used by everyone.

### Key Stakeholders for ICT Programming in Tanzania

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Role(s)</th>
<th>Key Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>National Government</strong></td>
<td>Law and policy enforcers</td>
<td>Enforcing laws and policies that favor all youth to be able to gain and access ICT</td>
</tr>
<tr>
<td><strong>Youth</strong></td>
<td>Key beneficiaries and influencers</td>
<td>Voicing their needs, using ICT skills to find employment, influencing others to take on ICT skills, and understanding its importance</td>
</tr>
<tr>
<td><strong>International NGOs or Community-Based Organizations (CBOs)</strong></td>
<td>Resources, funding</td>
<td>Being accountable for capacity building in youth ICT spaces, providing competition grants for young people with technology ideas</td>
</tr>
<tr>
<td><strong>Private Sector</strong></td>
<td>Advise on upcoming ICT skill requirements</td>
<td>Informing government, NGOs and CBOs of ICT skill requirements so strategic direction can be updated</td>
</tr>
</tbody>
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\(^{11}\) Njombe ICT Center Instructor Bariki Mpete  
\(^{12}\) According to male FGD participants from Njombe FDC  
\(^{13}\) According to female FGD participants from Njombe FDC
DATA SOURCES AND METHODOLOGY

This case study used various methods to attain data. I conducted two focus group discussions (FGDs) with youth, aged 15-24-years-old, from the Folk Development College (FDC) in Njombe. One FGD involved 10 females and the other 10 males, and discussions centered on their thoughts and ideas on ICT as a livelihood strategy. I conducted primary research by interviewing five key informants from three youth ICT spaces/hubs: Capital Space; Asikana Network; and Buni Hub. I also interviewed an ICT instructor from the Njombe FDC. Furthermore, I conducted secondary research by sourcing information online on websites, social media and publications.

Works Cited


Iffat Idris, “Barriers to women’s economic inclusion in Tanzania,” GSDRC, University of Birmingham, https://assets.publishing.service.gov.uk/media/5b432d9e40f0b678bc5d01c1/Barriers_to_womens_economic_inclusion_in_Tanzania.pdf, 23 May 2018.


Works Consulted


Innovate Tanzania, http://innovate.co.tz/.


She Codes for Change, http://shecodesforchange.org/.

ABOUT THE AUTHOR

Vick John Vigero
Njombe, Tanzania
vnoofus@gmail.com

Vick John Vigero, 25, is passionate about leveraging ICT to empower women and girls. She was born in Mbeya region and went on to attend primary and secondary education in Zimbabwe. In her free time Vick enjoys singing, travelling, reading food and fashion blogs.

Vick has several years of experience in social change and community development work spanning a variety of issue areas. As a volunteer for Restless Development, she supported the acquisition of employment and entrepreneurship skills by youth in the ICS program. She has also worked with an Mbeya paralegal unit, focusing on human rights for women and children; Forest Mazingira, an environment cleanup project and a living labs network, a community ICT program under TANZICT.

For her involvement in social change and community development Vick has been nominated for Tanzania Women of Achievement, Queens’s Young Leader, and a Ship for World Youth Delegate.

As a Kiongozi Fellow, Vick focused her research on the role of ICT skills in youth livelihoods programs.
This case study was made possible with support from Irish Aid and the International Youth Foundation (IYF). The findings and recommendations are the author’s and do not necessarily reflect the views of Irish Aid or IYF.

ABOUT THE INTERNATIONAL YOUTH FOUNDATION

The International Youth Foundation® (IYF®) stands by, for, and with young people. Founded in 1990 through a generous grant from the W.K. Kellogg Foundation, IYF is a global nonprofit with programs directly benefiting 7.7 million young people and operations spanning 100 countries so far. Together with local community-based organizations and a network of corporate, foundation, and multilateral partners, we connect young people with opportunities to transform their lives. We believe that educated, employed, engaged young people possess the power to solve the world’s toughest problems, and we focus our youth development efforts on three linked objectives: unlocking agency, driving economic opportunity, and making systems more inclusive. Our vision is to see young people inspired and equipped to realize the future they want. The International Youth Foundation: Transforming Lives, Together.

To learn more about the International Youth Foundation, please join us at iyfnet.org.