



# DadaabNet

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DadaabNet will bring wireless information, communications, and education to Dadaab, the world's largest refugee camp. Our mission is to create a youth run community Internet service and education provider. The project will bring a wireless intranet, internal camp/refugee communications system and lowest cost internet access throughout Dadaab and the nearby vicinity. Intranet will host free educational materials including videos made in Somali to be accessed through mobile phones and computers. We will make available educational materials pertaining to health, nutrition, sanitation, as well as education resources on computer training and how to use technology for sustainable development.

The structure works like this: To view the materials a refugee would give their name, email, and mobile phone number. This becomes the base for our youth communications system. This will empower the youth to be managers of their own communications networks under the watchful eye of the UNHCR rather than unmonitored Safaricom access. Youth can create networks within the system, take courses, become peer trainers, and will gain the skills necessary for employment both inside and outside of the camp. Internet will be made available at a low rate to increase affordability.

Technically the system requires a 801.22 Wifi connection extending across each of the three camps and the UNHCR compound. With a locally hosted server free IEC materials can be made available to anyone via mobiles and computers. Additionally the system can be utilized with restricted access areas specifically for interagency coordination and communications. This allows different NGO providers to communicate specifically with the target clients. For example, an NGO dealing with maternal and child health could use the system to organize pregnant women to monitor their pregnancy, provide information, and increase communications to reduce maternal and infant mortality. The system would greatly increase the communication options available and improve monitoring and evaluation systems.

Voices of Africa for Sustainable Development already has 2 peer trainers who have requested to come to serve in Dadaab and will train another 80 peer trainers through 4 fulltime staff in 4 months in our ICT4D and Social Enterprise Course which covers:

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Monitoring and Evaluation, ICT4D, Social Enterprise, and Social Media. After implementation, DadaabNet will be sustained through corporate partnerships with device manufacturers to sell their low cost technology products to those wishing to access the network through a grassroots distribution chain and Internet airtime sales creating sustainable income generating activities for those without alternative opportunities.

DadaabNet will prove to be highly beneficial to the Dadaabian community as it will bring opportunities for education, employment, and empowerment to millions of unemployed, impoverished youth in Dadaab and will create the network required for a critical mass willing to promote positive community development for peace and security.

Dadaab Refugee Camps are filled with youth who have either not attended or not completed secondary school. The youth “hustle” to make a living doing whatever is necessary to stay alive. These youth deemed unfit for employment have very few opportunities for self development and many desire the ability to assist their community. The profits will be deposited into an account where youth representatives will use participatory decision making principles to meeting the needs of the community. DadaabNet will network the youth, give them opportunities for education and advancement, and provide long term employment with shareholder’s social dividends for the community involved. These youth are also the primary targets of groups such as Al Shabaab for membership recruitment. If a significant number continue to be unreachable, we will lose them to negative behaviors such as crime and drug use.

## **Outcomes**

DadaabNet has two main outcomes which can be quickly implemented and measured. The current level of ICT infrastructure in Dadaab is not adequate and is privately held. While Safaricom and Airtel have service coverage the cost is still high on the retail price and no content access is available free of charge. With the creation of this network, any computer or device that has Wifi will be able to access free educational materials on an intranet walled garden. Additionally we will be able to send free SMS messages to clients, refugees, and aid workers and there is the potential for a free Voice over IP call system.

## **Activities**

The first activity is to establish a base for our organization in Dadaab and send our technical team to install the equipment, customize the software, and add content to the server for network utilization. After installation, the programmatic team will focus on peer training to ensure the availability of trained incentive workers to assist us and other NGOs in program delivery through ICTs. Installation can be done in two camps for pilot

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testing and then extended into the remaining two camps. The first two locations to be served would be the UNHCR compound with extension to the Norwegian Refugee Council and Ifo.

VOA4SD's peer trainers will teach a minimum of 100 students each over a course of 5 months about the basic devices needed to get into the web and how it can be used for development. Peer training will be offered free of charge with interested youth joining the full ICT4D and Social Enterprise course in its online version. After completing the course, students can become peer educators in their own communities. The goal is to have one peer educator per 100 youth. Peer educators are formed into teams in each area of the camps. They are responsible for training and support as well as registering new interested students.

## **Outputs**

The network will cover all of the refugee camps and the UNHCR compound. It will help NGO organization to distribute their IEC materials. We will begin with primary partnership with Norwegian Refugee Council. And secondary IEC materials partnerships with Oxfam, NCCK, CESVI, Save the Children, and UNICEF. Five organizations currently working in the camps in the fields of health, WASH, education, and waste management. Once the project is approved we will solicit educational materials from all of the NGOs working in the field to be placed on the free education network. The UNHCR staff and organizations can use their system for interagency communications to improve cohesion and capacity.

In the camps, the program can begin by training. Hardware training will include how to use the mobile phone to do more, how to use computers such as netbooks, and how to use tablet devices. We will work with these youth to ensure all hardware is appropriate and comes loaded with required software. Software to be included are: OpenOffice/Microsoft Office (word, spreadsheet, powerpoint, database), video editing, photography, music editing, blogging, website design, social media such as Facebook and Twitter. The communications platform will be built into Google documents as well for email, Google Maps, Picasa, and the new Google + social network.

By the end of the 6 months, 25,000 refugees will be introduced to the network through our outreach system. These 25,000 refugees will then have access to the same training system as the peer educators and after successful course completion can act in the same function. Within 24 months of program initiation, all youth in Dadaab can be aware of the ICT system, how it works, and how it applies to development. Within 36 months, we expect youth to be active participants in local content generation that can overcome barriers such as language and income level.

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## **Sustainability**

After initial investment in equipment and set up, the program will be financially self sustaining through Internet and equipment sales at the end of one year.

VOA4SD will have 7 staff on the field team: Logistics/ Accounting, Technical/Engineering Support, and 4 Trainer of trainers (TOT) with the Program Manager with 50% time in Nairobi and 50% time in Dadaab for the first 12 months. Staffing to be reviewed annually.

All other programs will be coordinated directly with and through the youth themselves with progress reports submitted weekly.

## **Organizational Capacity**

Voices of Africa for Sustainable Development have successfully implemented ICT4D projects across Kenya and in Uganda. VOA4SD is a registered Kenyan non-government organization. Our partners include CBOs, CSOs, small businesses, universities, corporations, and consultants. VOA has received funding from the UNDP under the small grants program and from the Internet Society. Our organization has well proven its capacity to deliver.

VOA's team is lead by the Executive Director, Crystal Kigoni who has a master's degree in International Health and Development from Tulane University and has been working in youth development since 2000. She is answerable to the board of directors.

Heiko Rehm is our Lead Engineer. Heiko is a German telecommunications engineer who has been working in Africa for more than 10 years.

Scott Kean is our Logistics and Security Coordinator. Scott has extensive experience of working in remote locations as a telecommunications technician, including Afghanistan, Kosovo and Iraq.

Our Project Coordinator, Nick Kungu has been with VOA since 2009 and now coordinates the current staff of 8 Kenyan youth in 3 projects reaching from the Rural Internet Kiosk in Ukunda, Coast province, to the Webuye Training Center in Western province, and our newest KiberaNet project to launch in August. Nick has a degree in Computer Science.



Minto Obor, our Lead ICT4D Trainer and does the e-learning content development and training coordination from our offices in Lavington, Nairobi. She has a degree in Computer Science.

Anne Wairimu is the Mazingira Zatu Program Manager working on peer to peer education and is current administering a program for rural farmers to share knowledge through video and low cost devices to increase crop yield.

We have a part time/volunteer staff of 20+ Kenyan volunteers and 4 international “virtual” volunteers to meet the ICT needs of youth across Kenya. Our financial accounting is outsourced to a professional company in Nairobi and records are kept within VOA on a daily basis. Monitoring and evaluation is taught as the first subject to all trainees. Each is required to create community baselines and to create and submit weekly reports.

### **Risks**

**Human** – Illness or death of organizational staff, the willingness of citizens to participate.

**Mitigation:** A strong enough volunteer support team will be able to fill the required position in the event of illness or death. Use appropriate networking and marketing to ensure local population is aware of and willing to support the scheme.

**Operational** – Theft of information and assets.

**Mitigation:** Information assets will be backed up and stored securely using the best practices for data protection. Equipment assets are to be registered with the NGO to be tracked using GPS and through online software to designed to shut down and located devices if they have gone missing or are stolen. Provide secure locations for hard ware equipment.

**Technical-** Equipment failures. Hot and dusty environment.

**Mitigation:** VOA will have a full time Computer Science graduate as the Technical Engineer who will ensure proper functioning of all equipment throughout the project cycle and will train 5 additional technical staff. Protect equipment from sun and dust.

**Environmental** – Natural disasters such as earthquakes and outbreaks such as disease.

**Mitigation:** Solar power will ensure consistent electricity.



## **Innovation**

There has never been a project like this previously in Dadaab. Nowhere else in Kenya is there free wireless educational content available without requiring web access. The unique ICT4D and Social Enterprise training is being offered only through VOA. The curriculum has approved by Africa Nazarene University at the certificate level. With the youth of Dadaab being participatory decision makers we are designing a new model for camp development. The technology being utilized is brand new and cutting edge. Dadaab will be one of the first locations in Africa to use it.

## **Partnerships**

Norwegian Refugee Council

CIDA

SPIDER

Africa Nazarene University provides quality control of the curriculum and teaching materials and certificate level accreditation. Student interns provide countless hours of volunteer services.

Plexus Technologies is a Kenyan technology business consulting company. Plexus specializes in low cost mesh networks in Africa. Plexus provides VOA with free consulting services in implementation and management.

Promote Africa is a South African company importing brand new, custom designed, low-cost Chinese technology devices for education and development purposes. The company has a triple bottom line approach and is interested in investing in DadaabNet to provide opportunities for the youth in Dadaab to sell technology related its products on a fair commission rate.

UNDP has partnered with VOA to bring ICT4D to rural communities in Kenya and VOA is now branching into informal settlements as the needs are as great and are quite similar.