

Build an E-Learning Center in rural Malawi!

Project Summary:

Mbando is an off-the-grid rural village in Malawi – with no electricity, Internet and limited mobile coverage. The people of the village suffer from a lack of education and access to learning resources, that have kept them in poverty. Abundance is helping to address this by building a solar powered e-learning center using the RACHEL and KEPPOD solutions that provides offline versions of the world’s best free educational websites, which are updated with the latest content regularly.

Theme: Education

Sub-theme: Technology

Requested funding amount: \$5,000

Donation options:

| Amount | Description |
|--------|---|
| \$10 | Sponsor a 1-1 training session with a trainer for 1 eager youth |
| \$25 | Sponsor a desk and chair for 1 eager youth |
| \$50 | Sponsor a 1-day training session with a trainer for up to 40 youths |
| \$75 | Sponsor two Keepods for two eager youth to access learning resources |
| \$140 | Sponsor one refurbished laptop for E-Learning Center |
| \$200 | Sponsor a refurbished laptop, Keepod USB and training for 1 eager youth |
| \$400 | Sponsor 2 laptops, 2 keepods and one day training at E-Learning Center |
| \$500 | Sponsor the purchase of solar panels to power the e-Learning center |

Project location: Mbando village, Machinga District, Malawi.

Additional Information

What is the problem?

The problem is, lack of access to learning resources and the internet for rural, off-grid and poor societies in Malawi. This prevents them from accessing information including education materials to further their knowledge and their bright ideas to start small businesses.

How will this project solve the problem?

The project will set up a solar powered E-Learning Center with offline technology called "Rachel" (<https://store.worldpossible.org/>) which has educational content in its module repository which youth can access to enhance learning and entrepreneurship skills. The low-cost computing solution will be in the form of Keepod flash drives (<http://www.keepod.com/>) and refurbished old laptops. Access to the internet through this E-Learning Center, will help empower rural youth and bring the internet to them.

Potential long term impact?

School teachers can use this E-Learning Center to get teaching materials and thereby positively enhance learning at the primary and secondary school at Mbando village. Unemployed youth had asked Abundance for short training on simple technologies such as soap-making, this information they can easily get through the E-Learning Center. The positive socio-economic impacts of the E-Learning Center will be documented as life stories by Abundance. We believe, empowered youth are the future of Malawi!

Project Document

Background of Abundance

"Abundance" is a non-profit organization working towards creating better lives for humans and caring for nature. We have adopted one village (Mbando) of 95 households at Machinga District in southern Malawi. We work with the community to "help them help themselves" and act as an enabler to improve well-being. We are an idealistic and optimistic organization mostly working through volunteers with a vision of "A world of Abundance where there is plenty for humans and where nature is thriving". Abundance began in 2016 with contributions from its co-founders, advisors and well-wishers with just a small budget of \$2,000. Using these contributions, the organization was able to do the following from **April 2016 to April 2018**.

- Provided fuel efficient stoves to 95 houses.
- Provided training to adolescent girls on reusable sanitary napkin production. Each of the 50 girls also received a sewing kit and fabric. Abundance was later invited to train another group of girls on the same by an NGO called Little Big Prints.
- Provided training to two youth for six months on vocational skills including carpentry, metal fabrication, computer hardware repair, sewing and entrepreneurship skills.
- Provided the two youth with a sewing machine and carpentry kit.
- Provided toys to the Community Based Child Care Center.
- Providing part of school fees for Tadala Phulusa, the first girl from this village to attend nursing school.

- Started a library which now has a full set of encyclopaedia, several children's books and a large lockable bookshelf and another one in production. The book donations came from several individuals and also organizations such as UNICEF Namibia and NaDEET (Namib Desert Environmental Education Trust).
- Provided the village with a bicycle ambulance (a stretched attached to a cycle) for transporting elderly, pregnant women and the sick who are not able to cycle or walk to nearest clinic). Later, through a contact from Abundance, the Malawians in Texas Organization provided Mbando village with yet another bicycle ambulance.
- Provided the Mchilima Mother's Group with a mountain bicycle which they use to transport sick children to the clinic and to search for children who drop out of school and bring them back to school.
- Providing air-time for Community Coordinator of Abundance has been ongoing through kind donation of a well-wisher on a monthly basis since 2016.
- Provided training to the youth on sexual and reproductive health and dispelling myths.
- Provided training to villagers on collection of seeds and how to start a tree nursery.
- Provided the youth with football and netball kits.

International Collaboration with University of Glasgow

In addition, Abundance was head hunted by the University of Glasgow and is now part of the "Sustainable Futures in Africa" network which is an inter-disciplinary network of academicians and practitioners in UK and Africa working across disciplines for making research more relevant for the developing world. Through this network, Stewart Paul, Secretary of Abundance attended a regional meeting in Botswana in 2017 and the co-founder of Abundance, Dr. Deepa Pullanikkatil undertook a secondment at University of Glasgow funded by the Engineering and Physical Sciences Research Council (EPSRC). Furthermore, Abundance partnered with University of Glasgow on a research study to look at biomass available for gathering information to solve the energy crisis in Malawi. Also, Abundance's Director Ruth Mumba and Secretary Stewart Paul attended a workshop of the Sustainable Futures in Africa in Lilongwe, Malawi. They also participated in another research on mapping and migration of communities undertaken by a team from the University of Glasgow.

E-Learning Center

Abundance has tied up with Shift IT, a non-profit IT company to help the community at Mbando village to start an E-Learning Center. This center will be set up despite the fact that the area does not have electricity, wifi connection and has scanty mobile coverage. Shift IT provided advice on how this is possible. To overcome the access to electricity challenge, solar panels will be used for powering the center. The internet experience will be provided to this rural offline, offgrid society through an offline technology called "Rachel" (<https://store.worldpossible.org/>) which has educational content in its module repository which youth can access to enhance learning and entrepreneurship skills. Each E-Learning Center user will have his/her own device to connect to

this learning hub. This low-cost computing solution will be in the form of Keepod flash drives (<http://www.keepod.com/>) and refurbished old laptops. Keepods only cost \$35 per person and old laptops are expected to cost around \$140. The center will be hosted in Mchilima primary school, which will be a contribution that is sustainable for the community and help teachers in the school as well as students.

Abundance hopes that the E-Learning Center will support 45 people to start with and then expand to 200 people in and around Mbando village. Teachers at Mchilima school could access learning materials and unemployed youth could improve their skills and knowledge which may inspire them to start small businesses. The youth had approached Abundance asking for trainings in simple technologies such as soap making. Once the E-Learning Center is set up, this information will be at their fingertips. That is true empowerment! The possibilities for enhancing human well-being through the E-Learning Center is enormous. Abundance hopes to document stories of how the E-Learning Center improved lives and this will be posted on Abundance’s website, inspiring more support for such rural communities.

Budget:

| Item | Number | Unit Cost (\$) | Total Cost (\$) |
|--|---|------------------------------------|------------------------------------|
| Keepods | 45 | 35 | 1,575 |
| Rachel device | 1 | \$499 | Donated by Co-Founder of Abundance |
| Refurbished Laptops | 5 | 140 | 700 |
| Solar solution including: 150w Ambient PV Module, 200AH Deep Cycle Batteries, 900w PSW Inverter, 30 Amp C/ controller, Cables, fittings, C/boxes, accessories, | This system is designed to run the 5 laptops, wifi at 50% DOD. 600 recharge cycles. | Detailed cost breakdown available. | 2,051 |

| | Qty | Description | Unit Price mk | Line Total mk |
|-------|-----|--|---------------|---------------|
| 1 | 3 | 150w Ambient PV Module | 160,000 | 480,000 |
| 2 | 2 | 200AH Deep Cycle Batteries | 250,000 | 500,000 |
| 3 | 1 | 900w PSW Inverter | 200,000 | 200,000 |
| 4 | 1 | 30 Amp C/ controller | 120,000 | 120,000 |
| 5 | 1 | Cables, fittings, C/boxes, accessories | 100,000 | 100,000 |
| 6 | 4 | Labour & Transport | 90,000 | 90,000 |
| | | | | |
| | | This system is designed to run the 5 laptops, wifi at 50% DOD. 600 recharge cycles | | |
| Total | | | | MK 1,490,000 |

| | | | |
|---|---|--|---------|
| Labour & Transport. | | | |
| Trainings for E-Learning Center | 2 training sessions of two days each | 1 trainer charges \$50 per day for his time, travel, accommodation and food. | 200 |
| Furniture | A desk and chair costs approximately \$25. We need a minimum of four. | 25 | 100 |
| Refurbishment of classroom for use as E-Learning Center | Painting, small repairs. | Lumpsum | 200 |
| Miscellaneous | Logistics, communication etc. | Lumpsum | 174 |
| | | TOTAL | \$5,000 |

A drone could be included in this project as a way of speeding up delivery of new information requested by the community. Abundance's team based in Zomba could send the drone out to the rural E-Learning Center every day to collect requests for new information. The community can write this request in a paper and send it back. The team can then download the information requested on to a flash drive and send back to the village using the drone. A trained person at the E-Learning Center can collect the flash drive from the drone and upload it on to the Rachel device and return the flash drive. A Co-Founder of Abundance has donated \$500 towards this cost and upon receiving enough funds, Abundance can implement this, once the E-Learning Center is set up.

Donation link at Global Giving

<http://globalgiving.org/projects/rural-offgrid-it-center-for-malawian-youth>

Sustainable Futures in Africa
School of Education,
College of Social Sciences,
University of Glasgow
Glasgow G3 6NH

11th April 2018

Subject: Reference for Abundance Worldwide

Dear Global Giving,

This letter is to confirm that Sustainable Futures in Africa (SFA) is recommending Abundance Worldwide as an excellent network partner. Abundance is a founding member of the Sustainable Futures in Africa (SFA) network and has maintained an excellent working partnership for two years. The SFA network is an interdisciplinary collective that brings together researchers, educators, and communities of practice that acknowledge the situated and complex nature of practices and conceptions of sustainability. The Network aims to build understanding, research, and practice in socio-ecological sustainability in Africa.

Abundance has continued to demonstrate true leadership in community development through active inclusion and community empowerment in its activities which strive to enhance local, natural resources. Abundance has hosted proactive community-led workshops as part of our partnership through the Global Challenges Research Fund UK on creative geovisualisation and renewable energy; most recently the “Exploring the role of Arts in Development Projects” workshop held in Lilongwe which proved to be a creative, innovative and active learning experience for all. Overall, the SFA network has found Abundance to be professional, loyal and an ideal community organisation for partnership.

I would be more than happy to give you more details if you would like, please don't hesitate to contact me.

Yours faithfully,



Dr. Mia Perry
PI and Co-Director: Sustainable Futures in Africa Network
Senior Lecturer, School of Education, University of Glasgow
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To

21st March, 2018

Global Giving
1110 Vermont Ave NW
Ste 550, Washington, DC 20005,
USA

Sub: Reference letter for Abundance

I am working in Malawi as a Technical Advisor for the National Statistical Office, seconded through the Overseas Development Institute (ODI). I have been closely involved with grassroots movements on livelihood and development in the country for the last two years.

I am delighted to refer Abundance – an upcoming non-profit organization that has been working in Mbando village, a remote rural village in Malawi. I know the founder Deepa Pullanikkatil personally, whom I've met on a number of occasions during her visit to Malawi and I personally know the Board Member of Abundance Megh Raj who is also the Director of Dignitas International, a Canadian NGO working in Malawi.

I had the chance to visit Mbando village recently and can vouch that it needs support as the community are needy mostly subsistence level. Read more about Abundance's work from www.abundanceworldwide.org.

The organization has not been funded externally and has been using contributions from its founders, Board Members and well-wishers who donate funds, their time, effort and resources (such as providing their vehicle for use for activities). So far, Abundance has achieved fair success in impacting lives at Mbando through providing fuel efficient stoves, bicycle ambulance, books for starting a library, donation of carpentry kit and sewing machine, a bicycle for mothers to take their children to the nearest clinic 3km away and training people at the village in the form of organizing short courses and sending youth for vocational training. They plan to start an IT center at the village and hence wants to fund raise through crowd funding.

This reference letter serves to encourage those who want to support small organizations and who want to make sure their funds are not used for large overheads but go directly into activities helping contribute to human well-being. If that is your intention, then you can support Abundance and help improve lives of communities in this remote rural village in Mbando.



Vineeth Vasudeva Murthy

National Statistical Office of Malawi
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Zomba
Malawi



C/O AGHCA
Little Big Prints
Livingstone Road, Zomba
Littlebigprints.malawi@gmail.com

TO: Global Giving

1110 Vermont Ave NW Ste 550,
Washington, DC 20005, USA

RE: REFERENCE LETTER FOR ABUNDANCE

I am the founder and director of Little Big Prints (LBP) – a mentor program for girls in community secondary schools based in Zomba, Malawi. LBP is recognized by the district youth office for our community work that engages, empowers and supports girls, especially those from rural localities, by matching them with a female university mentor; and facilitating discussion about obstacles to girls' education in rural-Malawi.

In October 2017 our project worked with Abundance – an organization that is also directly working with girls in Zomba. Ruth Mumba a representative from Abundance facilitated a half-day workshop addressing menstrual health and sanitation for our beneficiary girls. On the same day Ruth Mumba also conducted a demonstration tutorial with 20+ of our beneficiaries and 9 of our university mentors – Ruth taught them how to make their own low-cost reusable pads with inexpensive materials. Ruth Mumba was very professional – with good facilitation skills as well as effective at engaging the team.

This workshop by Abundance was highly relevant for LBP's beneficiary girls given that menstrual products for girls in community schools are not easily affordable. Providing such trainings and workshops is just some among the commendable work that Abundance coordinates in Zomba and other rural districts in Malawi.

Now that Abundance is crowd funding with the aim of reaching more beneficiaries with their goals to scale up impact, I am happy to refer Abundance to encourage any funds from interested donor – independent or otherwise – who would like to support this commendable organization.

Elita Chamdimba,

Founder and director of Little Big Prints