

## **Summary**

Ugandan schools food empowerment opportunity – **Growing Futures.**

Empowering school children to grow their own lunch through self sufficient and sustainable agriculture and extend this opportunity throughout Uganda.

A program conceived through collaboration between the Ugandan A.E.W. and Australian based Aliamos seeks endorsement by Ugandan government ministers and leading international NGO's.

## **Introduction**

Central to the lives of Ugandan people is food production and security. While the climate and soils provide good opportunities for agricultural diversity and food availability, the provision of balanced and sufficient nutrition has been adversely affected by the combined influences of conflict, illness, lack of empowerment opportunities and rapid population growth. In many parts of the country traditional farming undertaken by the hard working and strong Ugandan peoples, is providing most of the countries food supplies. In other areas like Northern Uganda the loss of traditional knowledge, skills and seed stock through generations of instability has left these regions dependant on welfare causing disempowerment.

In Universal Primary Education (UPE) schools throughout the country, most children go the entire day without food and many without water. The children are hungry and this is affecting their ability to concentrate and learn. Subsequently the education system's ability to meet the intended goals and provide career opportunities for students is adversely affected. This is hindering the country moving into a possible sustainable future of abundant food and development. Currently Uganda is unable to self sufficiently meet the challenges of feeding the hungry.

## **Case for action**

What is happening now in Uganda -:

- Food insecurity is endemic in Uganda
- School dropouts are high and basic education is not reaching all Ugandans
- Children suffer from malnutrition leading to poor concentration
- Teachers are not empowered to be teaching practical applications in agriculture
- Children are not experiencing the practical nature of sustainable agriculture
- Parents are struggling to pay school fees and many children do not continue with secondary education despite achieving high primary grades
- Malnutrition impacts people suffering from HIV/AIDS causing premature deaths and leaving orphaned children
- Irregular weather patterns related to climate change causing floods, famine and drought

With no change in current policy, education, support and aid these problems will continue to plague Uganda.

## Statement of opportunity

What is possible for Uganda -:

1. Children empowered to be leaders in organic agriculture, to provide food for themselves and sell excess to meet other socio- economic needs
2. Children as the source of knowledge in the community by teaching others
3. These children creating a future of food security, the future of the country
4. Children enjoy their experience of school and choose to learn in the garden
5. The school gardens provide the children with a healthy and nutritious lunch
6. Children create household gardens with their families
7. People infected with HIV/AIDS can live longer and provide a future for their children
8. Uganda leads the way in organic agriculture in schools and empowers other communities and countries throughout Africa
9. Uganda plays a leadership role in reducing greenhouse emissions and reducing the impacts of climate change

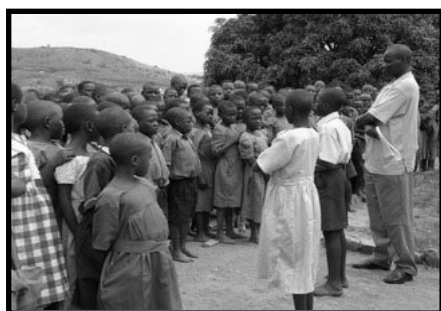


## Objectives

1. empower children to grow food to feed themselves
2. train children to be the trainers
3. extend this opportunity across Uganda and beyond.

## How this programme works

This program will teach children practical skills in organic farming. It will utilise the extensive knowledge in organic farming techniques already in Uganda and build on this knowledge base with the latest advanced organic farming and permaculture techniques from around the world. The program will provide access to the best varieties of trees, plants and seed stock available for the climate with an emphasis on natural non-hybrid open pollinating seeds to enable seed saving and self sufficiency. Where other resources are limiting food production (such as hand tools) then these will also be provided. The primary objective is to empower hungry children to grow food to feed themselves.



To maximise this program the students who choose to fully participate will receive additional coaching and empowerment to enable them to hone their skills in teaching these techniques to people in their surrounding community, surrounding schools, and schools in other districts. Once these possibilities have been realised it is expected that many of the skills taught can be used to generate income to enable financial self sufficiency.

Some of the skills taught that are expected to be income generating include; grafting, natural fertilisers, nursery management and seed saving. Financial self sufficiency is expected for each schools agriculture program within two years. Existing schools in the program will be encouraged to sponsor additional schools to join the program with knowledge, tools and seeds.

## **Action plan**

### **Structure/strategy**

This program is delivered progressively throughout Ugandan schools initially using volunteers and existing facilities and equipment, complimented where necessary by funding and support for the first 2 years. It is expected to be self funded and self sufficient after 2 years. The first phase which is nearing completion involves establishing two pilot schools, one in each of the districts of Kayunga and Masaka.

These schools have received full practical training in organic farming, nursery and plant propagation and seed saving techniques. They are supplied with sufficient farming tools to establish school gardens and nurseries and also provided with advanced highly productive plant and seed stock.

Students who step forward and express a desire to share what they have learnt with fellow students will receive coaching and training in becoming trainers of organic farming. Initially with the support of volunteer organic farming trainers, these two schools will extend this program out to at least two sister schools each in their local area, two schools in their local district, and two schools in other districts. The training period for each school involves 3 months of intensive training and 2 further months of follow up training.

After this 5 months of structured training the schools will continue to receive specific issues training and support for 2 years during which time they will fulfil their sister schools training program each training a minimum of six schools. Every school who accepts the invitation to join this program will also take on training sister schools and providing seed stock to these schools in this same way (ie. extension to a minimum of 6 schools).



**5 Districts - 7 Schools**



**10 Districts - 20 Schools**

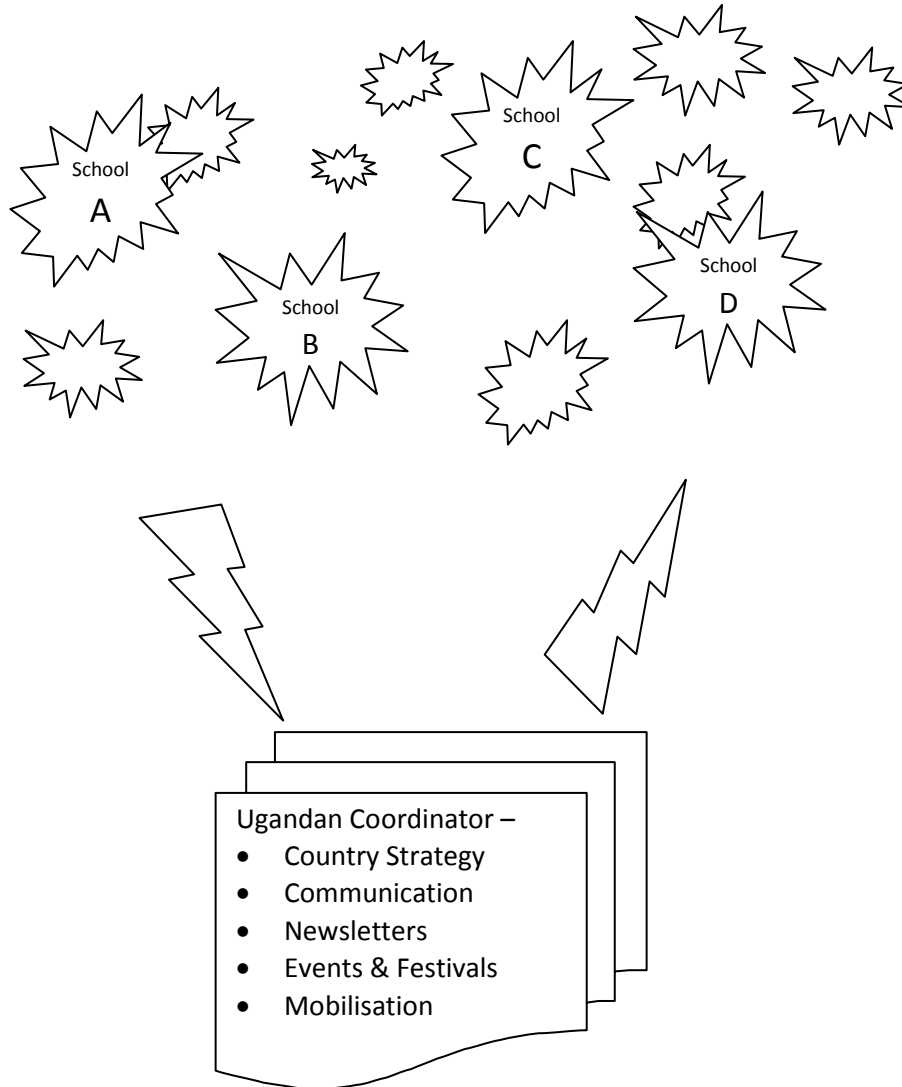


**18 Districts - 60 Schools**



**30+ Districts - 170 Schools**

The program structure is that of a flat network structure with a central coordinator/ communicator to ensure that the participating schools are receiving the best possible training and support. Communication and support between schools while being facilitated by the country coordinator will be informal and on a needs basis. It is expected that within a short time a support network of participating schools will develop.



Participatory events such as regular harvest festivals and a newsletter will encourage inter-schools support and promote sharing of knowledge and new innovations. The continued involvement of volunteers both local and international will ensure the program deals with Ugandan specific issues with the best organic farming techniques available globally. While each school will be responsible for their own participation, these support networks will provide the best environment for schools to fully adopt the techniques they are trained in and for the children to grow their own food.

## **Mobilisation**

Mobilisation of volunteers with various skills, knowledge and passion for the project, is expected to be a continuous activity. Four international volunteers from Australia, one Ugandan volunteer and two Ugandan University student volunteers have participated in the 3 months training and establishment of gardens in the two pilot schools.

Through Agency for Environment and Wetlands (AEW) networks, Ugandan volunteers are being mobilised. Students at Makerere University have expressed an interest in volunteering opportunities and approximately 12 environment students have registered to be involved in the program with more expected to join their ranks at the upcoming organic farming summer school for agriculture students. It's worth noting that the volunteering opportunity respects and considers all professional disciplines.

The international humanitarian empowerment organisation, Aliamos, has registered this opportunity for international volunteers with special skills in organic farming, permaculture, plant propagation, seed saving, training and also unskilled support. This organisation will also provide the minimal financial support required for project costs to roll out this program over the first 2 years.

Additional volunteer support within Uganda is being investigated through Kulika an organisation operating in Uganda. This organisation has trained many organic farming trainers in various areas of Uganda. Plans to connect this program with these trainers is expected to provide significant transport cost reductions by sourcing trainers locally and subsequently enable faster expansion to remote areas including the north. Initial discussions with National Environment Management Authority (NEMA) staff have suggested this collaboration would be highly productive.

## **Future support**

Analysis of potential corporate sponsors and partner organisations has revealed that endorsement of the program by the Ugandan Ministries of Agriculture, Education, and Environment and Water, WFP and FAO will encourage national and international support. Such support will enable a faster rollout and an exponential increase in the benefit to Ugandan children throughout the country. Endorsement will also open up opportunities for volunteers to seek support for their own expenses and for those committed to working full time on the program to seek wages support through grant applications.

Possible non government sponsorship opportunities exist with petroleum distribution companies to support transport costs and with telecommunication companies. Sponsorship would enable some of these administrative funds to be redirected allowing expansion to additional schools.

Early investment and subsequently accelerated rollout will result in on the ground benefits. This is caused by the program design of exponential expansion (extension of 1:6) and integral peer support networks. The sooner schools in remote areas can be supported, planting the seed of food self sufficiency, the sooner the primary outcome of food for hungry children will be realised all over Uganda.

## **Extension**

Intrinsic in this program is creating the children themselves, the key beneficiaries, as the future of sustainable farming in Uganda. Children who have benefited from the program are invited to be the leaders and share freely what they have gained. Those who choose to be involved in this aspect of the program are provided with the coaching and support to nurture their skills as teachers of organic agriculture. These skills are initially demonstrated on fellow students as they teach to their class mates under the guidance of the volunteer trainers and school teachers. They hone their skills on members of the surrounding community interested in learning these techniques.

These “lessons” are conducted at the school and subsequently the school becomes the local communities’ organic farming resource centre. Seeds are provided to members of the community who successfully implement the training in their own homes. With time seed stock and trees will also become available for purchase from the school or in the case of vulnerable members of the community may be provided free of charge. This is expected to bridge the gap that exists between many schools and their surrounding communities and encourage more community involvement in school activities thus improving the security of the school and its gardens. In turn the community will benefit from improved sustainable farming techniques and plant materials being available locally at much reduced cost.

### **Capacity building and resource transfer:**

The program invests primarily in the knowledge resources of the target communities. The transfer of this knowledge is facilitated through practical demonstration with the primary focus being on empowering the children to establish school agriculture which will provide them with food. To extend this opportunity to the maximum number of school children with the minimum of external resources, peer education is facilitated.

The program also relies on local and international volunteer support to provide training in the latest organic farming techniques to maximise this opportunity across Uganda. While this proposal does not include any provision for personal expenses or wages support for volunteers it is expected that key personnel committed to this program will seek support and sponsorship for these expenses separately.

The regular transport of Ugandan volunteer trainers to the individual schools, estimated to be an average of approximately 840,000 UGS per school over the 5 month training period, will initially be the greatest expense. Sourcing volunteers local to the area through Kulika is being investigated as a way to reduce this expense and enable more rapid expansion to remote areas. As schools complete their 2 years of program involvement this regional knowledge base will grow and it is expected that the transport costs will reduce.

The delivery of specific training in techniques which will provide commercial opportunities and financial empowerment makes it possible to provide only the minimum quantity of tools and equipment to individual schools initially. The total cost of the start up inventory which is selected based on a needs assessment is estimated to be on average 360,000 UGS. By encouraging a culture of giving these schools will not only be able to purchase tools and equipment for themselves to compliment their initial inventory but also to support sister schools. The result of this program design is that dependence on external financial resources are initially reduced and ultimately eliminated as the program moves towards financial self-sufficiency. Bulk importation of tools and equipment is being investigated as a means of cost reduction and import duty/tax concessions will be requested. While the international humanitarian empowerment organisation, Aliamos, has pledged support for these expenses for 50 schools over two years, if some of these costs can be covered by Government or

other organisations then the funding already pledged can be redirected to other priority areas such as transport, which is expected to be the limiting factor in the expansion of this program across Uganda and especially to the critical northern districts.

With a network structure providing the support framework for individual schools the administrative expenses is minimised. This design focuses the program coordination and communications on creating publications and events to nurture and promote this local support network. Corporate sponsorship and support for events such as the annual harvest festival and publications such as the quarterly schools newsletter will reduce funding requirements while providing community exposure opportunities for companies, CBOs, NGOs, and government, even in the remotes areas of Uganda.

### **Additional Opportunities**

In addition to the stated objectives, the program will create the local schools as a centre for knowledge and the hub of community. This opens up additional opportunities centred on the local school to provide for improved health, water supply and vocational training.

A sister program to facilitate appropriate and affordable local health through the provision of traditional and international herbal treatments is underway. A medicinal plant garden incorporating easy to grow medicinal plants has been established as a pilot at one of the schools on the program. Plants such as moringa, artemisia, aloe vera, garlic and neem will provide free and effective treatment and/or prevention for illnesses such as malaria, HIV, and other viruses and parasitic infestations endemic in Uganda. These illnesses are debilitating much of the population who cannot afford or do not have access to conventional treatments. This program will provide the opportunity for access to treatment complimentary and compatible with conventional medicines in areas where the illnesses are otherwise going untreated. A literature review has been undertaken and a living resource incorporating traditional medicinal knowledge published in English, Lugandan and other local dialects is in progress. The document will grow as local communities contribute their own knowledge. This document and the medicinal garden will be available at the school for local community access. Access will be facilitated through a local volunteer roster and these volunteers will be able to read instructions to illiterate members of the community and also to show community members the actual plants for identification and if necessary distribution of propagation material such as seeds or cuttings.

Complimentary to the food gardens program is the opportunity to provide training and assistance for the construction of appropriate technology water harvesting storages. Most UPE schools have iron roofing and the clean and safe water runoff from these buildings is an underutilised resource. The greatest impediment to the provision of a clean and safe water supply at each school is the cost of water storage or pumping infrastructure. To meet this challenge a trial appropriate technology water tank with a capacity of 5,000 litres was constructed using local building techniques and materials (sticks, vines, and mud) and sealed with readily available black plastic sheeting. The total cost of this tank was under 25,000 UGS which is within the capacity of most school committees and less than 100<sup>th</sup> of the cost of the metal or PVA alternatives. Further engineering testing is expected to prove this technology for the construction of tanks up to 30,000 litres.

By using the schools network and the international and Ugandan volunteer networks established as part of the school gardens program it will be possible to include vocational training into the extra-curricular activities at each school. School students and interested community members will already be offered practical training in nursery techniques including grafting, seed saving, planting and compost/manure tea, however investigations are underway to offer free training in other commercial ventures such as mechanical and bicycle repairs,

computer skills and maintenance, craft work, animal husbandry and building. This program will be targeted at bridging the gap between primary school graduation and financial empowerment for teenagers and young adults who cannot afford the secondary education school fees. Participants will be empowered to either pursue a career in these areas or to use these skills to generate the funds needed to educate themselves through secondary school and even university.

## **Conclusion**

**Endorsement of this program by the Ugandan Government, WFP and FAO** will directly contribute to the empowerment of Ugandan children to –

1. grow food for themselves
2. improve their health
3. train others
4. gain an education, and
5. learn vocational skills

and will directly support the possibilities of Uganda –

1. meeting the challenges of food self sufficiency, and
2. leading the world in organic agriculture.

**Sponsorship by petroleum and telecommunications companies** will accelerate these outcomes and allow rapid expansion into critical areas of northern Uganda.

**Corporate sponsorship and grants** to cover the travel and living expenses of the trainers and coordinators will secure the administrative and training support required to nurture this program through the critical first few years to maturity and self sufficiency.

## **Attachment A**

### **Budget**

The average budget per school has been determined based on local costs in early 2008. It is expected the costs per school will reduce as the program rolls out. See notes for details.

<b>Item</b>	<b>Inventory</b>	<b>Cost (UGS)</b>	<b>Notes</b>
Tools	eg. 5 hoes, 5 pangars, 5 sickles, 1 wheel barrow, 2 plastic drums	210,000	E
Plants & Seeds	eg. 50 banana suckers, 20 kg cassava, 20 fruit trees, open pollinated vegetable seeds	150,000	E
Transport	100km each way per school, 8 trips over 5 months (1600km/school)	840,000	R
Trainers	3 persons for 5 days, 8 trips over 5 months	funded separately	S,R
Coordinators Wages	full time - planning, publications, meetings, mobilisation	funded separately	S
<b>Total</b>		<b>1,200,000/.</b>	

E – eliminated after 2 years through financial self-sufficiency

R – reduced after 2 years through localised support network

S – funded separately

## **Attachment B**

### **Monitoring and Evaluation of activities**

Monitoring and Evaluation Matrices for Growing Futures project -:

Output 1: Children empowered to grow their own food at school and inspire their parents to do the same at home.

Indicator	Means of Verification			Baseline		Responsibility
	Source of information	Method of collection	Frequency of collection	What (Issue)	Where (source)	
Peer organic teachers trained	-Trainees (trained schools) -Trainers (training schools) -Training schedule / plan -Training reports	-Interaction with trainees and trainers -Reading training reports -Interview national coordinator -Reading Periodical reports from the national coordinator	Quarterly (every after three months)	Few organic farming trainers available.  Agriculture teachers in schools are lacking practical skills in organic farming.	-Testimonies from various National publications  -Interaction with most of the agriculture teachers in schools reveals this.	
Farming skills acquired at school replicated in homes	-Parents -Any other community members around the school	-Inspection of work in homes. -Interactions with community members	Bimonthly (At least done every after two months)	Some parents /homes lack sustainable farming skills. Most of the homes lack planting materials	-Physical inspections around school areas.  -As above	-Coordinator -Teachers

## Output 2: External financial, material and human resource support mobilised.

Indicator	Means of Verification			Baseline		Responsibility
	Source of information	Method of collection	Frequency of collection	What (Issue)	Where (source)	
Overseas and local volunteers participate in the project.	-Volunteers -Volunteer support institutions	-Reading volunteers reports -Contact support institutions -Quarterly reports -Project website	Quarterly	-Volunteers with passion required	Within Uganda and overseas (University students and any other person willing to make a change)	
Corporate partnerships created	-Partnership agreements -Partners logos appearing on GF project publications	-Read memoranda of understanding -View project publications to see partners logos		-For additional support and corporate image of the project	Within Uganda and overseas.	
Newsletters produced	-Published newsletters	-No. of copies produced and distributed		-To disseminate information about the project and also to mobilise more resources and schools to join the movement	-To various schools, Partner organisations, relevant Government departments, and others	-Aliamos & AEW (financial resources, articles and final production) -Participating schools (sharing experiences) -Volunteers (editing articles, layout etc)
Annual harvest festivals held	-Preparation minutes -Participated schools -No. of schools participated	-Referring to preparation minutes -Interaction with the surrounding communities	Annually	-As above -Sharing with the surrounding communities -Showcasing garden products	-To be held in the participating schools on a rotational basis	-School teachers, -Pupils -Volunteers -National and global co-ordinators (AEW & Aliamos)