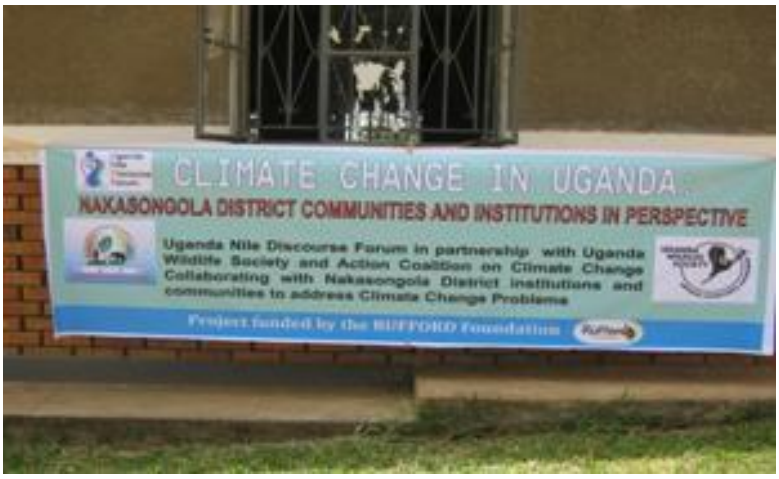
TECHNICAL REPORT ON IMPLEMENTATION STATUS OF CLIMATE CHANGE MITIGATION AND ADAPTATION PILOT PROJECT IN NAKASONGOLA DISTRICT, UGANDA

RSGF Project 9150-1

Project Location: Nakasongola Prison, Kirojo College School, Nakasongola SSS and Communities in Wabinyonyi Sub County and selected villages within and outside Nakasongola Town Council.

Project Duration: May 2011- March, 2012



Background

The implementation of the project activities is informed by the contents of the project document submitted to Rufford Small Grants-UK by the Uganda Nile Discourse Forum (UNDF) with Action Coalition on Climate Change (ACCC) as the implementing agency among others. In the same document, ACCC was tasked to address the two objectives of the project viz:

Objective 2: To contribute towards sustainable environmental conservation through community-based afforestation and awareness creation on wetlands management practices. This objective had the following subcomponents:

- Create awareness among land owners on the values of conserving indigenous tree species on their land;
- Promote tree planting in schools, other institutions and community land;
- Create awareness on wetland management and conservation

Objective 3: To contribute towards sustainable environmental conservation through promotion of climate change adaptation practices.

- Support communities in the construction of Rain Water Harvesting (RWH) tanks;
- Support schools in the construction of rain water harvesting tanks;
- Support the construction of energy-saving stoves in households;

- Support the construction of energy-saving stoves in schools.

Owing to the above objectives ACCC has accomplished some of the tasks that include the following:

Creation of awareness among land owners on the values of conserving indigenous tree species on their land:

This subcomponent was addressed during the awareness workshop that was held at the Nakasongola District Headquarters-Production Hall on 3rd October 2011, which was well attended by a diversity of stakeholders. Outside of the said workshop, ACCC spread out the awareness campaigns in selected schools, institutions and communities, which included Nakasongola Secondary School, Kirojo College School, Nakasongola Prisons[1] and Wabinyonyi community members. As a result of this awareness, the above schools pledged to work with ACCC in implementing the project activities. The interface between ACCC and the stakeholders is key in promoting the conservation of environment and indigenous trees[2] supplemented by tree planting. Indigenous tree species are disappearing at unprecedented rate due to human activities and limited intervention by the government in reversing the negative impacts caused to environment.

The photographs below illustrate some of the human activities such as bush clearing for farm establishment and approaches to the problem by ACCC.

ACCC staff sensitising students at Nakasongola SSS on the need to conserve indigenous tree species and environment.

Promotion of tree planting in schools, other institutions and community land:

Tree planting is a critical intervention in climate change mitigation and adaptation. Forests and trees have an important moderating influence on carbon dioxide levels, both for what they can add and what they can remove. Tropical deforestation and burning of wood contribute 20-30% of the world's annual carbon dioxide emissions (IPCC, 2000). Yet trees are also responsible for close to 70% of all carbon absorbed by vegetation. Any carbon dioxide contributions on a global scale caused by deforestation are more than offset by the sequestration capacity of forests and

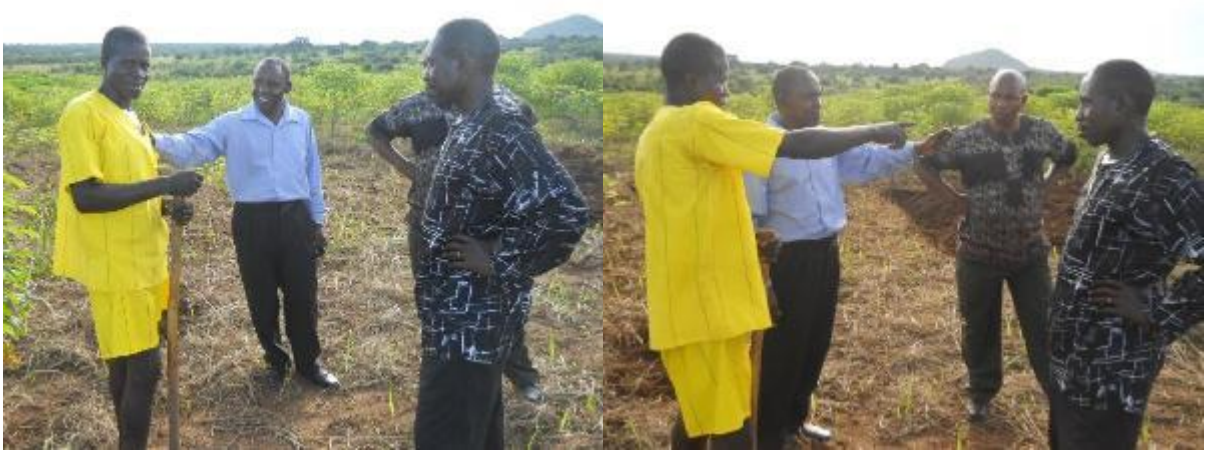
[1] For Nakasongola Prison, awareness campaign was made to prison warders, selected prisoners with the assistance of OC Prisons . Nakasongola Prison authorities accepted to offer land and labour for tree nursery establishment as part of community contribution requirement.

[2] Indigenous trees are almost facing extinction in Nakasongola due to massive charcoal-burning activity and pine tree planting.

agriculture. The Kyoto Protocol recognises forestry as an appropriate sequestration vehicle and that forestry can have significant influence on global carbon levels. The good thing about forests is that they are not dependent on any new science or technology. They can be designed to generate many collateral environmental and social benefits like flood/erosion protection, biodiverse wildlife habitat and restored ecosystems. One can plant them immediately at relatively low cost.[3]

The state of forest and green cover in Uganda is messy. Destruction and encroachment on the forest cover are most visible and it's expected to become worse given the high population growth rate. Over the last three decades, Uganda has lost a number of hectares of forests.[4] It is estimated that the forest cover had fallen to 3.5 million hectares in 2005. In Nakasongola the indigenous forest cover is disappearing at a rate of 75% per annum as a result of farm establishment, massive pine tree planting and charcoal burning among others. Nakasongola is the leading supplier of quality charcoal to the Kampala city and other emerging urban centres. It is for this reason that ACCC and partners envisage the promotion of indigenous tree planting and energy-saving stoves as best practices in minimising the dangers to environment. This has resulted into the need for the establishment of tree nursery beds that would supply the highly needed indigenous tree species to different communities in the district.

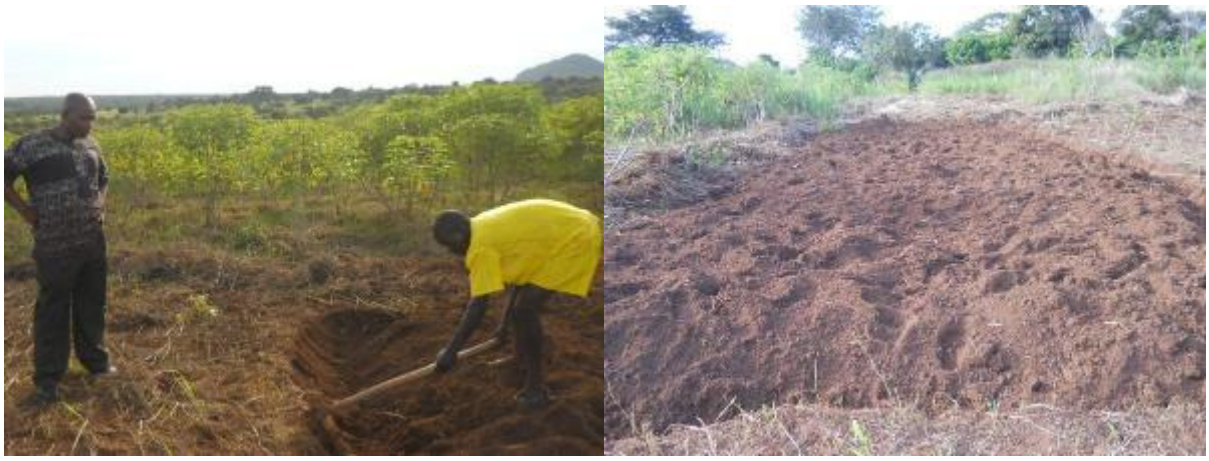
The photographs below show the initial steps at establishment of tree nursery bed.



ACCC staff briefing prisoners and prison warders on the site for nursery bed establishment at Nakasongola Prison.

[3] See the article by Enock Nimpamya, the Director, and Research for Action Coalition on Climate Change on: Planting Trees on that bare hill could save you painful droughts, published in the Independent Magazine, Tuesday, 29 September, 2009.

[4] 'We have been observing using satellite imagery that over the last 15 years we have lost more than 1.5 million hectares of forest cover,'• Xavier Mugumya, Uganda's forest management specialist at the National Forest Authority, told Reuters recently. This immense loss is as a result of global warming and human activities.



Land preparation for Tree Nursery bed at Nakasongola Prison land

Creation of awareness on wetland management and conservation:

The Uganda government provides for the protection and conservation of wetlands in its legal instruments. Article 237(2)(b) of the constitution provides that…Government or local government shall hold in trust for the people and protect natural lakes, rivers, wetlands, forest reserves, game reserves, national parks and any land to be reserved for ecological and touristic purposes for the common good of all citizens.

Wetlands are areas that are permanently or temporarily flooded by water and animals have become adopted.[5] About 29,000km^2 or 13% of the total area of Uganda is occupied by wetlands. They comprise swamps (8,832km^2), swamp forest (365km^2) and sites with impeded drainage (20,392km^2). Nakasongola district covers a total area of 3510 sq.km (about 1.42% of the country's total surface area) 4.5% is wetlands.

The drive towards conservation of wetlands is at the core of ACCC's mandate as an organisation. The creation of awareness on wetland management and conservation to the people of Nakasongola was conducted during the stakeholder meeting held on October 3, 2011 at the District headquarters. The efforts at sensitising the communities are still on-going in different schools and communities including churches. This is part of routine training conducted by ACCC in the pilot project areas where implementation of the two objectives stated above is taking place.

Supporting the construction of energy-saving stoves in households and schools:

This subcomponent has been achieved through the following activities:

- Training of local communities and secondary school students on energy saving stoves in relation to protection of environment, climate change adaptation and mitigation.
- Installation of Lorena and local energy stoves

Training of local communities and secondary school students on energy saving stoves in relation to protection of environment, climate change adaptation and mitigation

[5] This is the definition of wetlands according to the National Environment Act,CAP.153 under section 2.

At least 300 Secondary school students at Nakasongola SSS and Kirojo College School were taken through orientation and the steps of installing both local and Lorena stoves. For students, greater emphasis was laid on the local energy-saving stoves for duplication/ application of the same technology in their villages where wood fuel is the exclusive form of energy used. The understanding was that Lorena is comparably an expensive infrastructure that requires relatively huge amount of money and technical expertise. The local energy stoves installed at the respective secondary schools are to serve in the cooking of light or small quantity of food such as for teachers and a small number of students and also as demonstration facility for current and future generation of students. Students were involved in the erection and installation of locally made stoves at their respective schools and the technology involves locally available materials. Thus, the technology is easily adoptable and implementable at house hold levels. Students are bound to be change agents in their respective areas thereby helping in reducing in wastages often incurred by households in most parts of the area.

Kirojo College School Students collect materials to the construction site of energy-saving stoves

Left: Kirojo College School Students participate in the construction of energy-saving stoves; Right: Status of energy-wasting stove before construction of energy-saving stoves

Local communities were also trained at the residence of the Director of Kirojo College School in Wabinyonyi subcounty, Nakasongola District. In total 40 persons (25 females and 15 males) were trained on how to install the energy saving stoves. After a practical orientation session, 12 energy saving stoves were installed in selected households with the active participation of the trainees under the guidance of the trainer.

Installation of Lorena and local energy-saving stoves

Lorena stoves are very different from standard stoves, but they are also simple to construct and provide several advantages over conventional stoves. Lorena stoves are designed to enclose the heat produced by burning wood. Their main innovation is a curved passage inside the stove, which causes heat to be trapped in a circular motion beneath the cooking holes. By enclosing the stove, smoke is drawn into the chimney pipes and then expelled from the house. From an environmental perspective, Lorena stoves are fuel-efficient and use about half as much wood as the regular type of stoves used. If widely used, could significantly decrease the need to cut trees for domestic use.[6] In addition, allowing the smoke from burning wood to get out of the house, it is of health advantages in a sense that it reduces the risks of lung diseases. Owing to these documented advantages, ACCC and partners deemed it feasible to adopt the same technologies for Nakasongola District. Lorena was suited for the schools, in order, to cut down on high fuel wood consumption commonly faced in feeding the high student enrolment. [7]

The local energy-saving stoves are also important in the reduction of fuel wood and charcoal. They have immense advantages that include; are simple to construct using the locally available materials such as mud, bricks, cow dung and water. Hence, not much expertise is required and can be afforded by most households. They can be constructed in such a way that it can accommodate as many saucepans as possible, depending on the cooking needs of the household and the size of the stove.[8] It can save on time, for example, when there is need to cook three food items at once as in the case of a 3 in one stove.

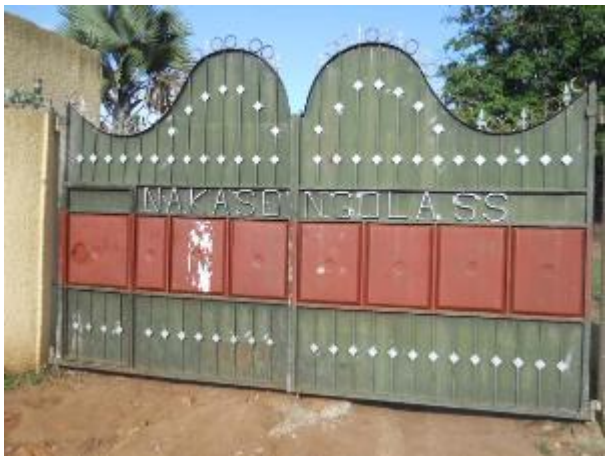
In summary, 12 local energy-saving stoves and 2 Lorenas have been erected in the pilot areas as indicated in the table below:

Lorena Stoves: Two (2) Lorena stoves were installed at Nakasongola SSS and Kirojo College School
Local Stoves; In total 12 local stoves were installed in the project area as follows;
1 in one Stove at Nakasongola SSS (0772519916)
3 in one at Kirojo College (0704924310)
2 in one at the residence of the Director Kirojo College (0772323344)
2 in one at the residence of Semanda Josephes (0779404688), Wabinyonyi Sub county
2 in one at the residence of Sempungu Henry (0779404688), Wabinyonyi Sub county
2 in one at the residence of Canon at Nakasongola C.O.U, Wabinyonyi Sub county

[6] See The Lorena Stoves by Community of Champigny in Central America, Latin America, Nicaragua; November 2000-March 2001.

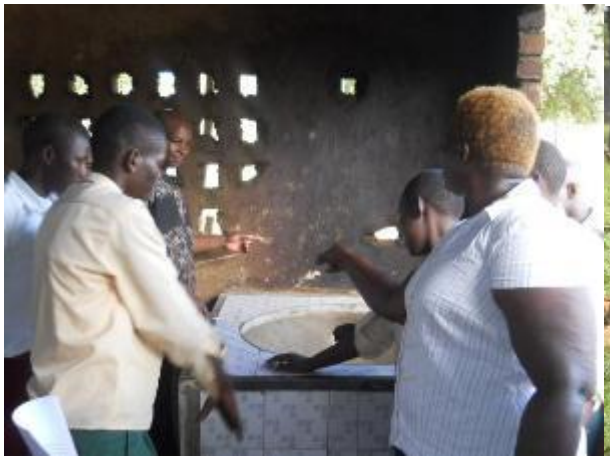
[7] Nakasongola SSS has an enrolment of 998; Kirojo College has over 500 students

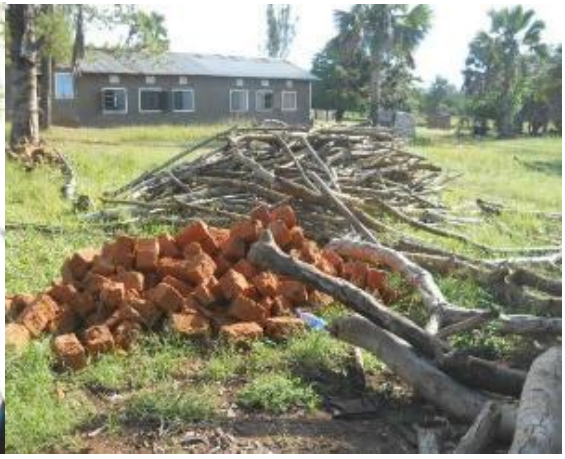
[8] Observation by Enock Nimpamya- Director for Research and Administration, ACCC while creating awareness on climate change adaptation and mitigation to community members and schools in Nakasongola.



Entrance into Nakasongola SSS, a beneficiary for energy-saving stoves

Left: ACCC and Nakasongola SSS staff looking at a finished Lorena stove; Right Lorena chimney for disposing of the smoke





Right: The Headmistress of Nakasongola SSS admiring erected Lorena Stove; Optimistic that it will reduce on fuel wood consumption Left: Heap of firewood, hitherto, wasted for lack of energy-saving stoves

Tree Nursery establishment

The tree nursery establishment is on course. The activity started with site clearing and preparation for eventual introduction of tree seedlings. Deliberate efforts were made to secure clean seeds from Namanve National tree seedling centre. The selection of tree seed species was at the advice of the forestry technocrats basing on their knowledge of the area where the tree seedlings will ultimately be established. The timing of the starting of the nursery activity was according to the advice of the local experts of the seasonal patterns. It was believed at the time that the three months of November, December 2011 through January 2012 were to fall in a dry season. Fortunately, rains have continued to the end of November and part of December 2011. However, climatic variations in the near future in regard to alternating drought with rainfall are not yet predicted. Otherwise, it was suggested to us that following the usual pattern, seedlings would better be transplanted to beneficiary's gardens during February- March 2012 rains expected in the area. That is, this period (November 2011) is considered suitable for tree nursery bed establishment with expected high germination percentage that would give enough seedlings for planting in the forthcoming rainfall regime early next year at minimal costs after establishing the seedlings in the prepared gardens. In addition, it was believed that the beneficiary communities such as schools will be back from long holiday and as such would participate in attendant activities that characterise tree growing from seedling stage aimed at minimal mortality of the transplanted seedlings.

Owing to the above efforts so far taken by Action Coalition on Climate Change in collaboration with Nakasongola Prison authorities and other core stakeholders, 2 Nursery Beds with 5,650 tree seedlings were established at the selected site, Nakasongola Prisons. Two species of seeds have been established in the bags and these include *Markhamia lutea* (Musambya*)* and *Albizia chinensis (*Mugavu) species. The selection of the seeds was informed by their adaptability in the area after consultation with forestry experts and other stakeholders acquainted with the Nakasongola Ecological zone. Other suitable tree species for the area such as *Acacia meamsii, Acacia hockii, Acacia Senegal, Albizia coriaria, Albizia zygia, Antiaris toxicaria* were out of stock at the tree seed selling centre. They could in future be procured for supply to the trained persons, in order, to raise them at their household level. The good attributes of selected tree seeds include; their resistance to termites, high germination rate versus low dormancy and their duality of advantages such as supplying timber and poles on one hand and conserving the environment on the other. They are also known not to take long to mature. For instance, *Markhamia lutea* (*Musambya*) can be harvested at 14 years of growth for poles and 16 years and beyond for timber.

Selection of the nursery site and seeds was followed by intensive training of 15 community members including 5 persons from the prison in the basics of raising seedlings under nursery conditions.

Seed bed being prepared from which soil will be got and mixed with organic manure before seeds germinate in a pot. Demonstration of activities being done at the site

Demonstration at tree nursery bed establishment-interaction between the technocrat and trainees

A nursery specialist demonstrating to trainees on how to make polyethene pot from which the seeds will germinate into seedlings

Status of the Seed Bed

Currently, the germination process of the two tree species is progressing on well with seeds that were potted first germinating first and that order. It often takes a minimum of three weeks for seeds to germinate. Germination is expected to reach peak levels of approximately 90 percent in the two species considered. The expected high percentage of germination is premised of a combination of factors: clean seeds from certified tree seedling centre at Namanve of National Forestry Authority, strict adherence to the procedures and technical expertise given to participants involved in training, choice and proper mixture of soil and sand, proper treatment of seeds before being put into bags, use of recommended bags and, of course, proper attention by the caretakers or tree nursery attendants of the site and professional supervision. Last but not least, favourable weather conditions with prolonged rainy season by one month, at least, as of the end of November 2011.

The Action Coalition on Climate Change reached out to Tree Talk of Straight Talk Foundation for support in the tree planting initiatives in Nakasongola District and they responded by donating appreciable sachets of seeds. Action Coalition on Climate Change has not been able to raise all of them in the nursery bed because of limitations of funding. ACCC as an organisation in partnership with UNDF to promote tree planting intends to donate the same seeds from Tree Talk to the Nakasongola District Forestry Department and other responsive stakeholders in tree planting initiatives to help in the raising of the said seeds.

Fruit tree growing

It was by popular demand that promotion of tree-growing in Nakasongola should encompass fruit tree growing. Fortunately, fruit trees grow well in drier agro-ecological zone in which Nakasongola District falls. In order to fulfil people's wish the overall objective of diversifying tree species and corresponding tree functions/ benefits, ACCC has spared some fund for the purpose of purchasing the already established fruit tree seedlings in recommended tree nurseries for distribution to institutions such as schools and other public schools. Fruit trees could not be included at the tree nursery establishment stage for lack of viable and quality seeds from the prequalified suppliers. The way out to this was to secure the already established ones to serve the same purpose in the project area.

Challenges

- High cost of operational costs accruing from high inflation currently prevalent in the country. This affected the amount of supplies and ultimately the scope of targets in regard to implementation of the set activities. The implementation agency, Action Coalition on Climate Change engaged in austerity / cost cutting measures, in order, to be able to install energy-saving devices, tree-nursery and conduct trainings/awareness on wetland management.
- The other problem included long distance between the source of assorted materials, especially for lorena stoves, this was aggravated by poor road infrastructure. This increased cost of transport both without and within the district.

Conclusion and Way forward

The planting of seedlings in different institutions and communities is dependent on the upcoming rainy seasons anticipated from Jan-March 2012. Trained communities will be given some seeds to

establish their own beds and plantations. It is hoped that this initiative will contribute to the greening of bigger swathes of the district, at least, in the long run. Tree-nursery establishment by individuals could serve as income generation in a bid to address poverty in communities resulting into adoption of some of the technologies that save energy that initially some form of expenses to install.

A diversity of seeds have been secured, which may not be raised in the established nursery bed and these will be donated to selected farmers and or district forestry department to supplement the good gesture by Uganda Nile Discourse Forum and Action Coalition on Climate Change with support from Rufford Small Grants.

For the next round of implementation of planned activities that encompass rain water harvesting, funds need to be released immediately this technical report is received. This will enable us put in place the water harvesting facilities at the selected sites before the escalation of the inflationary situation, which could exert limitation on the size and number of the planned facilities. Otherwise, the technical staff for both the rain water harvesting tank construction and those technologies suited to the local communities has been identified. The only problem is that prices for the materials to use in their installation and labour costs are increasing day by day.

On a whole, we hope for the best in the project implementation pursuits, the problems highlighted above notwithstanding.

RAINWATER HARVESTING TECHNOLOGIES IN NAKASONGOLA DISTRICT

Introduction

Training of the Nakasongola rainwater harvesting technologies was undertaken through enlisting the expertise of Katende Harambe Rural-Urban Training Centre based in Namugongo, Wakiso District. Overall, 20 participants were trained in the rainwater harvesting technologies. The choice of the training organisation was on the basis of its proven expertise in the technologies suited for local communities in, especially drier areas of Uganda. This organisation is adept at training in agriculture-related technologies coupled with rain water-harvesting techniques and maximising water for production. According to this organisation, every drop of water counts and this is reflected in the way they have transformed, maximised and integrated local resources in their training modules to enhance agricultural production in financially affordable terms for every person that cares to have food security, at least, at homestead level irrespective of agro-ecological conditions and landholding status.

The Katende Harambe Rural-Urban Training Centre was also selected for its professional competence at training of personnel for the theoretical and practical part of the construction of water technologies suited for local communities. Much as the training menu was meant to be confined to rainwater harvesting techniques, the trainer, one Malinzi JB together with his technician, one Nsamba Salim was competent and versatile. He was able to engage in other but agricultural production-related subjects using local examples and language/ methodology befitting of adult learners. This was particularly on the theme of enhancing production and productivity using minimal resources commonly found at African homestead level. His approaches of question and answers and, sometimes, posing well guided but challenging questions proved suitable for adult learners and kept the learners interest high. This approach generated much desired attention span during the training period that established a rich background for subsequent section of

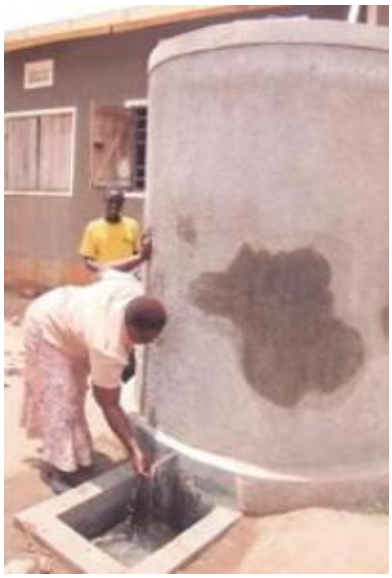
training that included that practical bit on the erection of the affordable rainwater harvesting technologies.

The 20 participants/trainees were multi-composed, that is, of different occupational backgrounds where desire of access to water is a common denominator. For example, some trainees were carpenters and masons. Some of these are expected to be trainers of trainees (Tots) who could further be trained to form Nakasongola residual resident capacity such that in future, the resources spent as professional fees to Katende Harambe Rural-Urban team is retained in the district. By having such a technical capacity in the district, future engagement that requires extending across the entire district will not only be cheap but sustainable as well.

Construction of concrete rain water harvesting tanks

It is worth noting that the training in local rainwater harvesting technologies went along with the construction of concrete rain water harvesting tanks. The construction of concrete rain-water harvesting was by a different group, that is, BAANA BA KINTU DEVELOPMENT ASSOCIATION. As according to the working document, herein, the proposal to Rufford Small Grants by UNDF, ACCC was mandated to construct two tanks at two selected schools. One concrete tank was erected at Kirojo College and the other at Nakasongola Senior Secondary School. Each of the two tanks is of 5000 litre water holding capacity. The two tanks were built with distinction and to the satisfaction of the beneficiary communities by contracted organisation, Baana Ba Kintu Development Association at the immediate supervision by the both the District Environment Officer and beneficiary school communities. These two beneficiary schools are credited for playing their part of the bargain, which was to contribute towards the project. Both schools, Kirojo College and Nakasongola Secondary Schools contributed local materials that included sand, bricks and water among others. Non-material contribution such as food and sleeping space were a boost and motivation on the part of the contracted personnel.

Left: Rain water harvesting tank (concrete) at Nakasongola SSS. A similar one was erected at Kirojo College



Right: Headmistress of Nakasongola SSS tapping water from the erected tank-proof that rain water harvesting is in progress.

The beneficiary schools have written in acknowledgement of UNDF/ACCC/UWS consideration, of course, with inscription acknowledging funding from Rufford Small Grants. Action Coalition on Climate Change has carried out monitoring and evaluation exercise on the project implementation right away from the beginning. The tree nursery was doing well save for failure to germinate of certain tree species. Markhamia species have done well except that the hostile climatic situation has forced vermins- the squirrels to feed on very young tree seedlings as their alternative food. The squirrel habitat was too dry/ scorched to the extent that their source of food in the wild was affected. Young tree seedlings in the nursery bed were the only alternative food. This grazing effect by the squirrels has affected the bulkiness of the seedlings of Markhamia species that has been found hardy and suited for the Nakasongola hot and dry environment. It was observed that squirrels though a menace to the young seedlings, they do not eat up the older seedlings. It appears at grown-up stage, the tree seedlings have accumulated defensive chemicals that make them unpalatable to squirrels and other vermins. There are currently 700 seedlings due for transplanting. The prison authorities and Kirojo College have shown interest in having them transplanted. The only limiting factor at the time of our monitoring was the prolonged and severe drought that could not allow land preparation in which the seedlings are expected to be planted. We have received information that rains have started and would-be beneficiaries of the seedlings have been encouraged to prepare the seedbeds before rainy season wanes.

Tree seedlings of Markhamia species in the nursery bed at Nakasongola Prison grounds

Tree Nursery supervisor pointing at growth stage prone to squirrel damage

Training and construction of raised and ground rainwater harvesting tanks

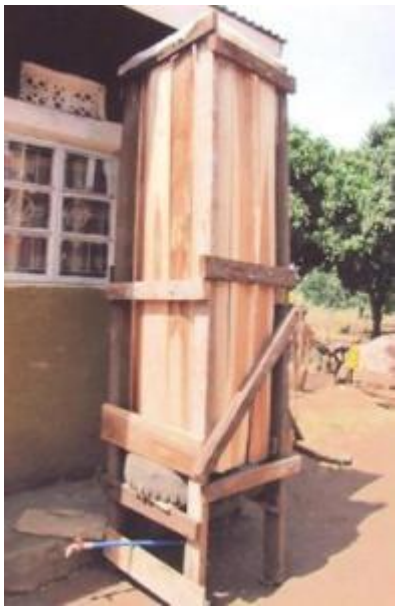
As stated above, the training was comprehensive in content, diversity and scope. In all, it was not restricted to the above rainwater harvesting technologies alone but rather to what harvested water together with the remains and by-products of agriculture such as maize cobs, stems and animal droppings can do to enhance production and by so doing alleviate poverty at house hold level.

During the first day of training, theoretical discourse was alternated with demonstrations using improvised resources at the trainer's disposal. This was visually acknowledged during the second day of training where practical construction of the technologies was done.

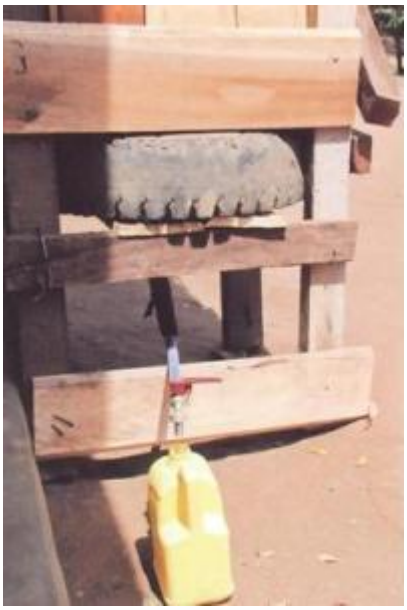
On the second day of training still, demonstration was carried at one of the trainees' premises using his house's roof catchment. However, the selected beneficiaries to the technologies could not raise good materials in the spirit of community contribution. For example, the beneficiaries of the raised

tanks were expected to provide locally available materials that include: Eucalyptus poles (straight) in growth form, 10 pieces of timber and 5wood planks. While ACCC as an implementing agency fulfilled its part of the bargain, there was an unintended omission on the part of the beneficiary communities. First, the straight poles, particularly of eucalyptus trees are a rarity in the area. This necessitated an extension in the erection of these technologies at the two identified households. This was to allow them time to acquire the required local materials. The technician from Katende Harambe Rural-Urban Training Centre was again facilitated to complete the remaining work but our monitoring exercise that he only worked on one raised tank. He is yet to complete one raised and one underground tank. The technician's argument was that the second beneficiary of the raised tank was not ready with local materials needed while for the underground tank, the ground was still hard due to prolonged rainy season. Now that rain season has set in, ACCC will continue to engage the technician from Katende Harambe Rural-Urban Training Centre since he has been fully facilitated in that regard.

For the underground tank, the problem pertaining on the ground was the hardness of the ground that impeded the attempts at making the pit according to required specifications. Now that the area has received rains in the recent past, pit-digging has been possible and the Harambe Technician will altogether work on this task as well.



A raised water tank: Suitable for local communities



A raised water tank: Lower part showing fitting where water drains our to the container

Constraints

High cost of construction materials and labour: It is an acknowledged fact that the current high inflation affected the prices of every aspect that concerned the implementation of this project. Remember, the proposal on which this funding was made was submitted in to Rufford Foundation for Small Grants before commodity prices got hiked. Even the service providers charged for the services in the general inflationary framework. In successfully carrying out the trainings and erecting rain water harvesting facilities ACCC as an implementing organisation had to tighten the belt such that implementation fit within the working document- the proposal for funding. It was

real austerity measures at work. We operated on very meagre resources given the context of expensiveness with capital developments, mostly of construction nature.

It was also noted that community contribution on the part of institutions is much easier and quicker than with community members, which made the implementation of the project at institutions (schools) faster.

Conclusion

The training exercise was largely successful going by the enthusiasm exhibited by the participants during the two days of training. They are of the view that next round of training, a few members be selected to attend on-ground training sessions at The Katende Harambe Rural-Urban Training Centre. The trainees promise to contribute towards this cause, especially by way of transporting themselves to the venue in Namugongo. I am of the view that can be part of the planned activities with next round of funding. The same wish was portrayed when we went for monitoring exercise. I think this would be part of the workplan activity for the next round in the implementation framework.

Recommendation

We recommend that in the case of unforeseen scenarios such as inflation, the implementing organisation be allowed to scale down on the budgeted for activities to suit the changed economic times. Funding authorities could get explanatory notes over such a matter. Otherwise, I foresee a time when the prospective implementing agency declines to take up the task that puts it at the risk of having to borrow to subsidise the completion of the started or planned project.

The timing of nursery establishing activities needs a balancing act due to the menace caused by the vermins, specifically the squirrels. Nursery establishment could better be done when conditions in the surrounding environment are not devastatingly hostile as to affect the animal habitat's food abundance and distribution. In this way, the nursery trees will survive the devouring/grazing effect by vermins as it appears that as tree seedlings grow, they develop and accumulate chemicals that make them unpalatable to vermins.

Overall, it was a learning encounter and we look forward to doing quite a better job other factors such as timeliness of fund release and prior preparation in the implementation area among others being considered before hand.