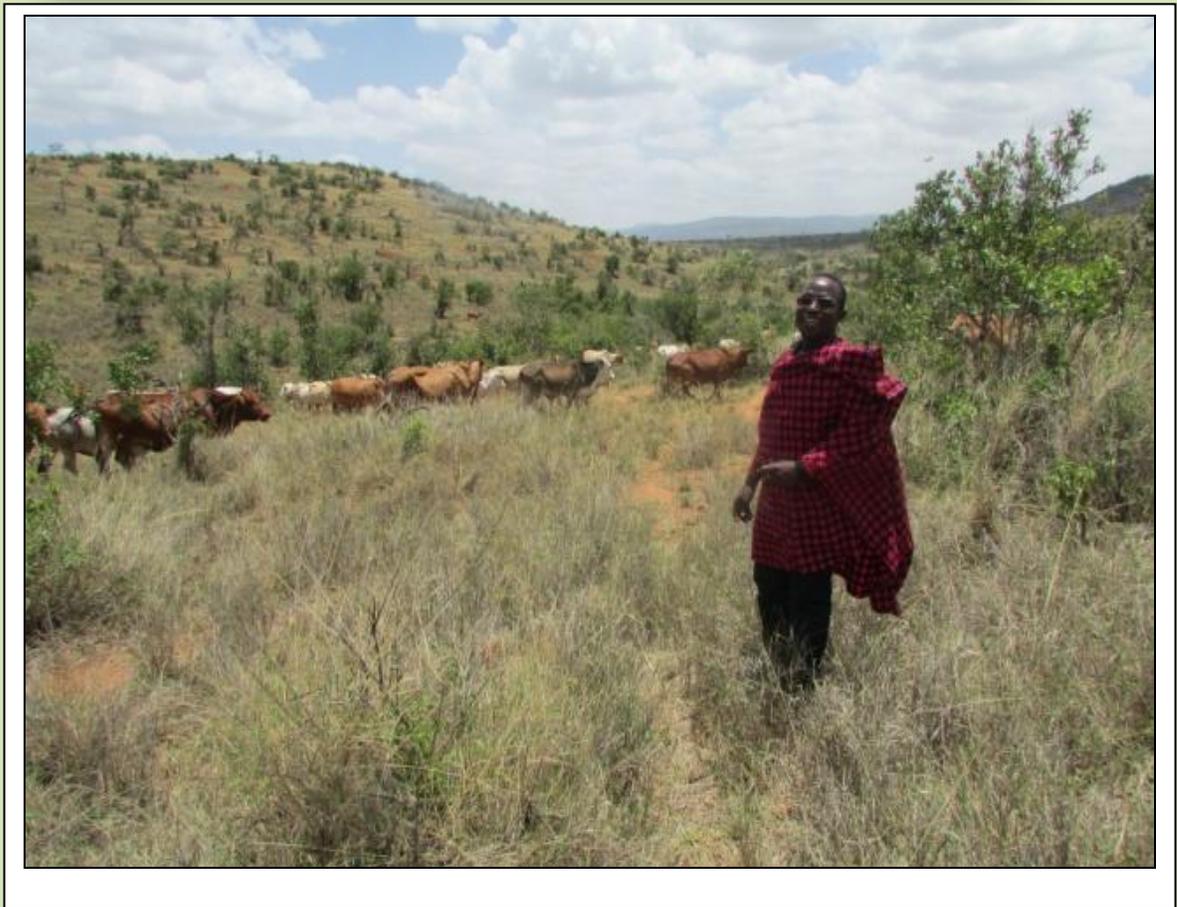


NEWSLETTER



April 2018 Issue No. 013

ECHO's Best Practices!

In this issue:

1. Pastoralist symposium
2. Appropriate technology
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4. Parthenium
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UPCOMING EVENTS.

Best Practices on Improving Nutrition in Dryland Areas Symposium
7th – 9th August, 2018
Naura Spring Hotel
Arusha, Tanzania

Best Practices on Sustainable Agriculture and Appropriate Technologies Symposium
12th – 14th February
Naura Spring Hotel
Arusha, Tanzania

For more information and registration of the two symposiums above please visit:
www.ECHOcommunity.org

For more updated information visit us on facebook at
<https://www.facebook.com/echoeastafrika>

DO YOU WISH TO
ANNOUNCE A TRAINING
OPPORTUNITY?
LET US KNOW AND WE
WILL POST IT ON
www.ECHOcommunity.org
East Africa Blog

SYMPOSIUM

Best Practices in Pastoralist Areas

ECHO East Africa was blessed to conduct the Pastoralist Symposium between the 6th-8th of March 2018 in Nanyuki, Kenya at which 50 participants attended for 3 days. The quality of the presentations was appreciated by participants, and the workshops on three themes – land tenure, range management & rehabilitation, and livestock to markets – were well appreciated and lively, with suggested best practices and potential future actions by various stakeholders cited.



Pictured on the left side shows participants in a group photo outside the main hall

Participants had an opportunity to visit the Borana Conservancy after the three days of the symposium to learn best practices to improve pastoralism activities. Presentations from this symposium are now available on www.ECHOcommunity.org
Kindly sign in to read resources and past presentations online.



Symposium attendees walk across a rope bridge at Borana Conservancy

ECHO EAST AFRICA NEWS

ECHO RICs share information and resources on sustainable agriculture and appropriate technologies in the surrounding region. ECHO interns, volunteers and advisors who work to achieve its mission of sharing resources are provided with mutual advantages and opportunities.

NEWS IN BRIEF

Interns support



Erwin Kinsey gave a word of thanks to Sean; an intern from Wheaton College who volunteered with ECHO for six months during a farewell devotion at the office. Sean worked at the tree nursery and helped in developing sign boards with price identification

“Newsletter from Network Organization”

[AgriProFocus Newsletter - October 2017](#)

[Conservation Agriculture-newsletter-december-2017](#)

[Conservation Agriculture-newsletter-march-2018](#)

APPROPRIATE TECHNOLOGY

Smart Biogas Network project:

ECHO team along with partners from CREATIVenergie, CAMARTEC and Scene UK completed installation of sensors on pilot digesters with farmers near ECHO’s office, and reinstalled the hub near ECHO’s office. Data is now being collected and trouble-shooting of the system is being completed. The results of Biogas Remote Sensors system after almost one month since the remote monitoring system was introduced on six digesters, have shown higher accuracy and provides more reliable data than before when monitoring relied only on what farmers said; now data collections are shown by pressure fluctuations. This information relates different estimations than those provided previously by farmers. Some who underestimated the cooking time of their digesters, said there was only 30 minutes cooking time when actually we found through the sensor system that time used exceeded one hour. The system has revealed that some farmers use their digesters at a higher frequency than what they report. Repair of one tubular digester involved several visits to one farm to repair a leakage at one end of the digester and the team worked until it was fixed. -Interviews were administered to biogas installers, manufacturers and other stakeholders around Arusha, Moshi and Babati by Maria, Joseph, and Harold with the help of interns. Surveys were conducted during the first two weeks of October among 29 interviewees each for more than one hour! We hope that these interviews will help to understand issues associated with biogas plants and their use. Moving forward the UK team will keep ECHO informed of themes which emerge from the data analysis and if further interviews will be conducted by interns in due course.



Pictured shows a survey team interviewing one farmer Ruben (in white shirt)

Inauguration of Parthenium project



ECHO East Africa, in collaboration with TPRI and other stakeholders, held a Parthenium day event at TPRI hall. The event aimed at the inauguration of the Parthenium project of raising awareness to Arusha dwellers in order to eradicate an invasive weed. The event was blessed to have 150 participants. Pictured above shows participants listening to a presentation about Parthenium



The Guest of honor, The Arusha regional commissioner Mr. Mrisho Gambo, Peace Corps Director Mr. Nelson Cronyn and Parthenium Chairman Mr. Kaaya when officially presenting the opening of the project of raising awareness about the invasive weed, Parthenium supported by Peace Corps.

The Smart Biogas Network (SBN) team from UK and Tanzania conducted a summit during March 2018. The summit aimed to receive feedback from users, technicians, and stakeholders of organizations/companies regarding performance of remote sensor systems that were installed on the six digesters for testing purposes during October 2017. In short, the summit found that the remote sensor systems that were installed in six digesters last October are working well. The team is working to develop a beta prototype by end of April 2018 producing a final product by the end of October 2018

ECHO EAST AFRICA SEED BANK: Improving soil nutrients by planting Jack Bean

The Mafie family, Kaneli and Happiness, visited ECHO East Africa for the first time in March of 2016 to inquire about the use of slurry from biogas as a fertilizer. When visiting ECHO they were shown around the compound and learned various techniques of conservation agriculture that could help improve their farm, one technique being to use green manure/cover crops. The Mafie's left ECHO with a variety of fruit tree seeds and one kilo of Canavalia seeds, a cover crop that is highly encouraged to farmers for increasing nitrogen levels in the soil and providing shade for the soil.

Fast forwarding to present day, the Mafie family wanted to invite ECHO staff to see the success in their farm since using Canavalia as a cover crop. Niel Miller, Charles Bonaventure, and Malvery Begley of ECHO East Africa visited the couple and their farm located near their home in Njeku village of Arumeru District. The farm is located on an incline at the foothills of Mt. Meru. Mr. and Mrs. Mafie's farm consists primarily of coffee and bananas however they also have a corn field intercropped with beans, 60 vanilla vines, beds of spinaches, hot peppers, passion fruits and papaya trees.

When entering the coffee and banana farm it is obvious to see that the soil is well covered by Canavalia. The two say that Canavalia has helped reduce top soil erosion during strong rains. They also tried testing within their maize farm what the impact of Canavalia would be on the open area. They found that Canavalia was able to cover the soil, instead of it being open and bare and the canavalia was causing greater moisture retention and therefore healthier maize. The Mafies' continue to show neighbors and other farmers their success in using Canavalia. Kanaeli and Happiness hope that within their community the use of Canavalia will expand and a market among smallholder farmers can develop.

ECHO staff present was told by Mr. Mafie that the one kilo of Canavalia seeds from ECHO was divided in half among another farmer; the half kilo of seeds planted has now produced just over ten kilos. From their first harvest of ten kilos, they re-planted seven kilos and successfully sold the other kilos to local farmers. The harvest from the seven kilos planted is pictured below together with individually packaged half kilos to sell to local farmers.

Gardening



Pictured above shows Malvery giving instructions about a sack garden

Teachers and their students from Christ Church International School (CCIS) of Kwa Idd, Arusha visited ECHO East Africa and had a chance to learn about home gardening.

Moringa training



Rick Kemmer of Strong Harvest International leading training about Moringa and its uses to trainees at ECHO East Africa Impact Center' training

The couple says that they are continuously harvesting Canavalia and are expecting to continue using and performing more trials on how Canavalia can further support their farm. For more information, request the seeds through this easeeds@echonet.org



Above Mr. & Mrs. Mafie show off their Canavalia pods and seeds which they harvested

PARTHENIUM HYSTEROPHORUS Parthenium hysterophorus awareness committee project

Parthenium hysterophorus is a noxious weed which invades roadsides, is allergenic for humans, infests pastures and farmland, causing disastrous loss of yield, as reflected in common names such as famine weed. In many areas, heavy outbreaks affect livestock health, crop production, and human health. Parthenium was first spotted in Arusha in 2010, since then the weed has spread at an amazingly fast rate and is increasingly causing a threat to national food security in Tanzania.

In 2017 a committee was formed to educate and promote awareness of Parthenium to citizens of the Arusha region. The committee consists of twelve persons who have an intrinsic passion for community development and a desire for parthenium to be eradicated. The committee was recognized by Regional Commissioner of Arusha, Tanzania Mrisho Gambo, in October of 2017 at the opening announcement of the committee's project. With the support of the United States Peace Corps and ECHO the members of the Parthenium Hysterophorus Awareness Committee have been able to travel to rural villages of the Arusha region to combat the spread of Parthenium by educating locals and farmers. The goal of the project to visit fifteen villages of the Arusha Region and educate the greater communities has gained much attention. The project continues to gain support through national and local radio stations, local businesses, governmental researchers and government officers. The committee has successfully trained 54 Arusha regional and local government agriculture and livestock officers. As a result, the Parthenium training is reaching a far wider audience than was planned by the project and the Regional government has created a monthly 'Parthenium Day' to encourage the public to eradicate the weed wherever it is present. In the span of two weeks starting February 5, the Parthenium Committee has traveled to six villages across the Arusha Region of Tanzania, impacting just over 830 farmers and hundreds of school students to further understand the dangers of Parthenium. In Tanzania the noxious weed is referred to as "Gugu Karoti".



Edited By: Erwin Kinsey
Charles (Bonny) Bonaventure, Sophia
Kasubi, and Malvery Begley.

The committee found when arriving at various villages, that after farmers were shown which weed is “Gugu Karoti” they were shocked that they had been feeding their livestock the weed and many complained symptoms of skin rashes and hay fever, which the weed is known to cause. Many testimonials have been shared, of farmers who have abandoned farms due to Parthenium overtaking the land. Committee members and volunteers continue to teach farmers, teachers, students, businessmen /women to uproot Parthenium wearing protective clothing and gloves or something to protect one’s hands. Village community members are also taught the use of GM/CCs for suppressing growth of Parthenium and revitalizing the soil. The ability to continue teaching across the Arusha region would absolutely not be possible without the dedication and countless hours brought by the committee and the many volunteers from ECHO. Given another invasion in 2017 in the region, Fall Army Worm, also encountering an uninformed public, ECHO has combined training about Parthenium with training on how to combat the FAW.



Parthenium Awareness committee members pose for a picture after a project planning meeting

For more information on Parthenium visit this [link](#)

Do you need a consultation? (For pay or free): ECHO RICs provide opportunities for other agencies to obtain consultations for free or pay, according to the nature of the request.