

# NEWSLETTER



**April 2019 Issue No. 015**

**ECHO's Best Practices!**

## 5<sup>TH</sup> SYMPOSIUM ON SUSTAINABLE AGRICULTURE AND APPROPRIATE TECHNOLOGIES.

*By Sophia Kasubi; ECHO East Africa Executive Assistant*

ECHO East Africa held a symposium on Sustainable Agriculture and Appropriate Technologies from the 12<sup>th</sup> -14<sup>th</sup> of February 2019 at Naura Springs Hotel in Arusha, Tanzania. The event was blessed with one hundred and sixty five (165) participants from seventeen (17) countries within Africa, North America and Europe (Tanzania, Uganda, Kenya, Burundi, Rwanda, Uganda, Democratic Republic of Congo (DRC), Zimbabwe, Zambia, Malawi, Ghana, Senegal, South Sudan, France,

Netherlands, Canada and the United States of America). Out of 165 participants there were thirty six (36) presenters, twenty (20) women who received a scholarship by the Meredith Muryank Memorial Fund to attend the symposium and eight (8) participants working in health and nutrition such as a doctor, nurse, or gardener who also received scholarships by the John Byler Memorial Fund. Those who received these waivers thanked ECHO East Africa for providing the opportunity to participate in the

symposium, as it helped them to change their way of thinking and to gain very valuable information. Participants specifically mentioned the emphasis on African traditional vegetables—their nutritional value and also how to plant them. The symposium gave new insights, new knowledge, and encouraged them to see how other non-health practitioners are concerned about the well-being of people, addressing their needs through agriculture and food production in general.



**ECHO's Vision:** *Honoring God by empowering the undernourished with sustainable hunger solutions.*

**ECHO's Mission:** *Reducing hunger and improving lives worldwide through partnerships that equip people with agricultural resources and skills.*

Participants enjoyed morning devotions each day led by Dr. Christopher Kenyi who reflected on the nature and scope of God's assignment to mankind. Also, Mr. George Mkanza elaborated more on how to work in God's image by exercising dominion. Morning plenary sessions and afternoon sessions were mainly centered on scaling up conservation agriculture among small African farmers, marketing and value chains, botanical pesticides and crop threats. Other sessions included: Climate smart

agriculture, conservation and nutrition concerns, using information, communication technology to reach small African farmers and social and spiritual issues. Together with these sessions participants learned about mitigating Newcastle Disease to improve food security, propagation techniques, seed germinating and soil mediums, composting with biochar and urine, airtight underground grain stores among Dodoma farmers, and invasive weed control.

Presenters came from various countries and institutions across Africa, North America and Europe. All of the edited PowerPoint presentations are being uploaded onto the ECHO website: [www.ECHOcommunity.org](http://www.ECHOcommunity.org), and can be accessed and viewed by all our network partners, both those who attended the event, and our worldwide network. Videos of the morning plenaries and a few select afternoon breakout sessions are also accessible by all on the same website.



*"This symposium has benefited me abundantly. Especially through connections and meeting new people, but most importantly on acquiring knowledge, skills and awareness on many things I didn't know before. In summary this has been a great exposure for me"*

Saing'orie Sangau – Tanzania  
(February, 2019)

Throughout each session, participants were able to ask the presenters questions and discuss sustainability within agricultural sector in relation to conservation agricultural practices. Participants were also able to share experiences from where they are living and were able to learn new things which they were not aware of before. Each attendee received seed kits from ECHO which composed of ten different accessions of green manure cover crops for soil fertilization and vegetable seeds for nutritious purposes. Names of the seeds issued to participants are: Jack bean (*Canavalia ensiformis*), Velvet Bean (*Mucuna pruriens*), Lablab (*Lablab purpureus*) – ECHO

Cream, Pigeon Pea (*Cajanus cajan*) –MALI, Moringa (*Moringa oleifera*), Grain Amaranth (*Amaranthus cruentus*), African Nightshade (*Solanum cabrum-Nduruma* (BG16), African eggplant (*Solanum anguivi*) - AVRDC-small fruits, Spider Plant (*Cleome gynandra*) and Chia (*Salvia hispanica*).

Post symposium field trips were available to participants. These field trips included tours of the World Vegetable Center in Usa River, Arusha to see traditional vegetables and postharvest handling, ECHO East Africa Impact Center to see ECHO's best practices, and a Conservation Agriculture (CA) field practical at Ekenywa to see new implements for

mechanized conservation agriculture (CA) - with Neil Miller and Harold Msanya. The last group went to Christopher Kellner's home in Sakina to see composting, biochar, and human urine used as fertilizer.

### Upcoming Symposia

Best Practices of Improving Nutrition and Sustainable Agriculture in Highland Areas  
26<sup>th</sup> – 28<sup>th</sup> November, 2019  
Hilltop Hotel  
Kigali, Rwanda

Best Practices of Improving Nutrition and Livelihood in Pastoralist Areas  
2<sup>nd</sup> – 4<sup>th</sup> March, 2020  
Moroto, Karamoja – Uganda.

For more information & registration please visit  
[www.echocommunity.org](http://www.echocommunity.org)



## ENVIRONMENTAL CONSERVATION

**By Erwin Kinsey; ECHO East Africa Vice President**

ECHO East Africa equips individuals, communities, churches, schools, Government and non-government institutions with environmental conservation education, as the best way to reduce environmental degradation in farms, water sources, and within living areas. In order to ensure these activities are well planned and implemented, ECHO East Africa has continued to expand and maintain its demonstration plot and tree nurseries. The Impact Center aims to provide sufficient education on planting trees for conserving the environment and to sustain future generations. ECHO welcomes people to visit our demonstration plot and tree nurseries to see and learn various types of trees species which are available, and engaging visitors and volunteers to work with surrounding communities in environmental conservation activities.

The Impact Center provides technical support in climate-resilience projects, engaging students in environmental issues and problem solving. This project has enabled the

outpouring of environmental conservation education to many beneficiaries. ECHO East Africa tree nursery is quite different from other tree nurseries, as it offers educative tours of different trees such as threatened indigenous species, native species, exotic trees, fruit trees, as well as fodder trees, spices, herbs and other useful species for the welfare of humans and animals.

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.

***Visitors from Carleton University toured ECHO East Africa to see indigenous and exotic trees varieties***



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ANNOUNCE A TRAINING  
OPPORTUNITY?  
LET US KNOW AND WE  
WILL POST IT ON  
[www.ECHOcommunity.org](http://www.ECHOcommunity.org)  
East Africa Blog**

**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. Please write to [ekinsey@echonet.org](mailto:ekinsey@echonet.org)

Please register yourself to become a member of ECHO East Africa through [www.echocommunity.org](http://www.echocommunity.org) to have access to online materials or consult Sophia Kasubi at [skasubi@echonet.org](mailto:skasubi@echonet.org)



**Edited By:** Erwin Kinsey, Sophia Kasubi, Harold Msanya and Elena Brooks

## EMPOWERING SMALL SCALE FARMERS WITH SEEDS

*By Sophia Kasubi & Rose Dusabeyezu; ECHO East Africa seed bank manageress*

With over 400 accessions, ECHO East Africa Seed Bank has continued to offer services of imparting small scale farmers and gardeners in East Africa with seed saving and management skills at small scale levels. In East African countries, similar to other developing countries in the world, seeds are vital part of agricultural work. There are two systems in managing seeds in East African countries: informal and formal seed systems. The formal seed system is well recognized and receives major support by the Government leaving the informal system to be less recognized. This has pushed ECHO to fill the gap to make sure promotion of the informal seed system is well known and understood among small holder farmers. In doing so, small scale farmers are

encouraged to continue to multiply, save, manage and distribute seeds among themselves in order to sustain agriculture initiatives. Access to quality and good seed is very important for the development of any small scale farmer.

ECHO East Africa Seed Bank has continued to work towards encouraging small scale farmers to make use of legumes which are used for land fertilization instead of using chemical fertilizers from industries that continue to degrade both land and the environment. The ECHO EA Seed Bank also encourages small scale farmers to grow and consume indigenous vegetables that are good for their health and wellbeing. These varieties are also good for the environment as most of

them do not need chemical pesticides or fertilizers to grow well.

The ECHO East Africa Seed Bank has shared its experiences of dealing with indigenous or uncommon seeds to organizations that wish to include aspects of indigenous seeds within projects and then pave a way for partnership in dealing with the welfare of small scale farmers. In doing so, ECHO East Africa has been consulted by many organizations to provide technical support when it comes to dealing with seeds.

Seeds Packets Distributed 2018/2019		Grams of seeds Distributed 2018/2019		
Months	Packets for Free	Paid Packets	Grams for Free	Grams for payments
April -18	55	10	1498	42500
May-18	20	0	181	11740
June-18	26	3	0	2000
July-18	296	5	1000	2010
August-18	1,395	130	8383	3000
September-18	185	13	1105	3000
October-18	207	5000	913	0
November-18	428	415	1274	25000
December-18	260	0	0	0
January -19	147	0	969	5132
February-19	2,099	0	1299	0
Mar-19	1239	30	17063	12000
<b>Total</b>	<b>Total 6357</b>	<b>5606</b>	<b>33685</b>	<b>106382</b>

*The above chart shows distribution of seeds for the year 2018/2019.*

## NEWSLETTERS FROM NETWORK ORGANIZATIONS.

[Conservation Agriculture Newsletter - March, 2019](#)

[Conservation Agriculture Newsletter -December, 2018](#)

### HISTORY OF MARESHA PLOW

By Harold Msanya; ECHO East Africa Innovation Coordinator

Access to appropriate, affordable and easy to maintain conservation agriculture (CA) implements is a challenge for East African small scale farmers. The CA congress for African countries on mechanization, which was held in Johannesburg South Africa in August 2018, observed this also. In efforts to find solutions to this problem, the ECHO East Africa team, involving farmers, local fabricators, staff, and interns/volunteers on working to modify a local Ethiopian ripper called the Maresha plow, which can be used as a planter for common crops (maize and

beans). The team developed the first prototype of the seeder during April 2018 and has continued to improve this equipment over the past year. Since early April of 2019, at least nine prototype versions have been developed, tested, and received feedback from users.

The 9<sup>th</sup> version of the Maresha seeder performed well during March-April 2019, and it was used to plant maize and beans in farms near the ECHO office. Siwandet Mebuko, a local farmer who participated in the development of all nine versions, and he has used

the seeder to plant maize seeds in his farm. He says, "I like the Maresha seeder. The time I saw the first prototype, I liked it. It is similar to most of our local technologies that we have been using for many years. My wife and I have tried to use it to plant our farm and we have realized that it is nice equipment." Local farmers in various places where the seeder was tested were excited to use it. Currently the team in EA is planning to develop standard drawings for Maresha seeder so that it can be disseminated to other places.



*The Maresha seeder pulled behind a BUV truck, in a field along a hill with plenty of grasses present (picture above)*

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