

EAST-WEST SEED

KNOWLEDGE TRANSFER ANNUAL REPORT 2019



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This is the second public report by EWS-KT. For further information and access to online annual reports (published in March of each year) please see kt.eastwestseed.com



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1. MESSAGE FROM THE CHAIRMAN



Our approach of evidence-based extension as epitomized by demonstrations is a practical way of more than just bringing better varieties and good farming practices to farmers. It is an opportunity for the farmers to see these varieties and practices in action and hence make informed decisions with regards to their farming activities. The East-West Seed Knowledge Transfer (EWS-KT) approach, which also emphasizes safe and responsible production, not only contributes to improvement of yield and quality of products but also safer-to-eat vegetables. In addition EWS-KT's engagement with agro-input dealers and markets makes us a key player in the vegetable value chain.

EWS-KT looks for win-win solutions for stakeholders in the vegetable sector. Smallholder farmers win through more profitable and sustainable production systems. The agro-input markets win because a farmer with improved income can afford to buy seed and other agro-inputs. Consumers win because they get a wider choice of quality and safer-to-eat produce.

2019 was a year of making giant strides. For the first time we were able to reach 100,000 farmers in one year. In Africa we expanded our work in Uganda to include West Nile. We also expanded our work in Nigeria from Kaduna to include Kano. In Tanzania we started a stand-alone knowledge transfer program on the backbone of the joint project SEVIA. In Asia final preparations were made to commence knowledge transfer work in Bangladesh in 2020.

All this expansion could not have occurred without the support of all our partners. With their support, we believe that our ambition to train 1,000,000 farmers in the next five years is not just a mirage but something that will surely come to pass.



We hope the recent acknowledgement of EWS-KT as an ANBI institution will encourage more like-minded organizations to partner with us. ANBI is the recognition from the Dutch Tax Authorities that our work is principally aimed at public benefit i.e. improving the knowledge and skills of smallholder farmers, thereby improving their livelihoods and nutrition security.

Enkhuizen, March 2020



Rutger Groot / Chairman, East-West Seed Knowledge Transfer Foundation

2. FROM THE DIRECTOR'S CORNER



Since 2015 we have systematically increased our capacity to reach more farmers every year. With an ambitious plan to now reach one million farmers over the coming five years, we have put a strong focus towards developing our internal skills and capacities as well as improving our organizational structure and processes. We are confident that these investments will best position us to meet the new challenge ahead; ensuring we are able to scale up and deliver the best quality technical support and opportunity for change to one million farmers.

Our support team has put a tremendous effort in developing new training modules and capacitating country teams in both technical and management skills. This has resulted in a fantastic year where we were able to reach more than 100,000 farmers through high quality field based activities.

EWS-KT is dedicated to improving on-farm skills and innovation of smallholder vegetable farmers. Core to our approach are peer led demonstrations which act as a hub to showcase best practices over several seasons. With improvements to our Field Monitoring App we were able to closely track the progress of nearly 2,500 of these farmer managed plots. The average return on investment over 2019 shows the huge economic potential that vegetables can have for smallholder farmers.

Our aim is simply to put farmers on a positive path of change. The key farmers we work with are adopting improved practices at an astounding rate. For the other farmers we trained in 2019, the length of this path and the destination they reach will be influenced by many factors. However for most, their strive for higher yields and increased income is resulting in steady step-by-step change.



2019 was an exciting year for us. The year that Simon Groot, the founder of EWS, was awarded the World Food Prize. This recognized his transformative role which empowered millions of smallholders to earn greater incomes through enhanced vegetable production; benefiting hundreds of millions of consumers with greater access to nutritious vegetables for healthier diets. It's amazing to think of the profound impact that comes from quality seeds and good agricultural practices.

Chiang Mai, March 2020

Stuart Morris / Director, East-West Seed Knowledge Transfer Foundation

3. FOUNDATION PROFILE

a. Background

From its very beginning EWS company has centered its business model around the win-win existing between farmers and company. Developing varieties with the specific agronomic and marketable traits has led to opportunities for both farmers and the company to grow their businesses.

EWS Knowledge Transfer Foundation was established to bring future opportunity in less developed areas. Areas where farmers struggle with low and poor quality yields and areas where farmers have limited access to knowledge and the agri-inputs that they need to transform their hard work into a profitable business.

EWS-KT's independent management ensures that our work is exclusively focused towards benefiting the smallholder farmers we work with. Although our activities are entirely public goods, KT specifically focuses in areas where the company has a vision to grow new markets. The objective of KT is simply to showcase profitable and sustainable farm practices. With the uptake of improved practices a demand for better quality agro-inputs is catalysed. This unique relationship sets us aside from typical CSR activities and typical NGO projects.

What KT brings in public goods benefit is complemented and further enhanced by the independently funded and managed market development activities of the company. Together, the parallel activities of KT and company benefit the farming community with the knowledge that they need as well as a sustainable source of quality farm inputs for their future.

By default, working in areas where the company aspires to grow new markets ensures our focus is in less developed areas where farmers most need our support. One hundred percent of our work is public good focused - we do not support any commercial or promotional activities (although the development of competitive input markets can be seen as a byproduct of our work).

b. Our Board

Rutger Groot chairs the EWS Knowledge Transfer Board of Directors composed of former Dutch Ambassador to Thailand Joan Boer, EWS supervisory board member Joost Pekelharing, current EWS CEO Bert van der Feltz and Flip van Koesveld of Wageningen Plant Research (in an advisory capacity).

c. Our Team

Team EWS-KT comprises of 140 staff members in 8 countries of which 65% are men and 35% women.

4. Sharing Technical Expertise

EWS-KT brings technical expertise to communities of smallholder farmers through the following key activities.

a. Capacitating Key Farmers

EWS-KT provides in-depth training to carefully selected key farmers on a wide range of topics, including:

- Basic agronomy, soil improvement and land preparation
- Seedling production and transplanting
- Pest and disease management (IPM) and safe handling and use of pesticides
- Nutrient management
- Crop maintenance, harvest and planning
- Market awareness

We recognize that farmers learn from each other more than from anyone else as encapsulated in the saying “tell a farmer to tell a farmer.” So Key farmers remain an innovative source of advice for neighboring farmers; acting as hubs of good production in the coming years. EWS-KT works in partnerships to link these farmers with relevant service providers and stakeholders, thereby better integrating previously excluded farmers into market value chains. Over 2019, EWT-KT worked with a total of 104,236 farmers in 7 different countries.

b. On-farm demonstration

EWS-KT supports the establishment of demonstrations on farmers’ fields. The project team collects detailed farm data on inputs, outputs and activities. These Key farmers receive intensive support for at least two crop cycles (if possible increasing to three to aim at year-round production). The EWS-KT team visits each demo farm weekly to provide technical advice. Data collected on expenditure and income via EWS-KT’s mobile app is used to substantiate success when promoting improved techniques during field days.

Over 2019, EWT-KT supported key farmers to establish a total of 2496 demonstration farms.

c. Peer Learning

EWS-KT uses demonstration farms to conduct peer learning sessions on all aspects of sustainable and profitable vegetable production - from land preparation to harvest. EWS-KT also organizes practical and theory-based short village training; based on crop or technology-specific needs. These training sessions help farmers understand agronomic principles related to their fieldwork. Where possible, EWS-KT strives to ensure women’s participation. In several countries we look for innovative solutions empowering women in vegetable production. In India we have been working through local ‘Rural Extension Workers’; women volunteers who are trained to share information and ensure greater (and more active) women participation in training events. In Myanmar we have had a focus on women key farmers as a more effective means to get knowledge deeper into local communities.

d. Technical Field Days

At the peak of the cropping season, when treatment effects are apparent, field days are held to disseminate the same technical information shared during village training - but condensed into one session. It is also an opportunity for the farmer to share his/her experience with the variety of good practices with his/her peers. As well as technical information on crop production, EWS-KT uses these events to share financial and marketing information. Based on farm records, an analysis of cost and return is used to improve understanding of the benefits of adopting new varieties, technologies and practices. Vegetable traders and agro-input dealers are encouraged to attend field days. This is expected to stimulate increased production through disseminating information on market opportunities and availability of inputs.

e. Extension material

EWS-KT has produced a series of high-quality training modules and extension material specifically designed for smallholder vegetable farmers in local languages. To ensure best practices and up-to-date recommendations on agro-chemicals, these materials are designed in close cooperation with Wageningen University and Research. All of EWS-KT extension material (technical crop guides, instructional videos) are available through our on-line learning platform ([GrowHow](#)).

Over 2019, the following guides were added to our comprehensive collection:

- Two new technical guides - Reading Pesticide Label and Home Gardening
- Two new crop guides - Waxy corn and Habanero - for Nigeria

Seven Youtube videos were developed (in Thai and English):

- Bitter Gourd production
- Coriander production
- Kailaan production
- Pumpkin production
- Tomato production
- Vermicompost production
- Fruit Fly Management

Existing guides were translated into 18 additional languages in 2019 (this brings the total to 36 languages)

- Uganda (Acoli, Bari, Juba Arabic, Lhukonzo, Luganda, Luzobeyi, Rutooro, Lugbarati Si, Lusoga)
- Nigeria (Hausa)
- Mozambique (Portuguese)
- Arabic
- India (Gujrathi, Kannada, Tamil)
- Laos (Lao)
- Pakistan (Urdu)
- Guatemala (Spanish)
- Tanzania (Swahili)

A series of Training of Trainer modules have been designed and developed by EWS Knowledge Transfer. Courses are currently available in English, Thai, Bahasa, Hausa, Khmer, Myanmar and Filipino:

<p>Crop Economics</p> <ol style="list-style-type: none"> 1. Importance of Planning in Vegetable Production 2. Cost Planning and Decision Making in Vegetable Production 3. Choosing a Crop and Variety to Plant 	<p>Crop Environment</p> <ol style="list-style-type: none"> 1. Overview of Factors Affecting Crop Yield 2. Climatic Factors Affecting Crop Yield 3. Topographic Factor 4. Edaphic Factor 5. Soil Management 6. Nutrients Required in Plant Nutrition 7. Nutrient Management 8. Acid Soil - Liming 9. The Components of Soil Health 10. How to collect soil sample and do N-check
<p>Crop Production</p> <ol style="list-style-type: none"> 1. Nursery for Vegetable Production 2. Open Field Seedling Production 3. Protective and Cellular Seedling Production 4. Nursery for Vegetable Production 5. Open Field Seedling Production 6. Protective and Cellular Seedling Production 7. Planning Seedling Production 8. Field Preparation, Mulching and Trellising 9. Transplanting 10. Water Management 11. Irrigation Systems 12. Drip irrigation 13. Fertilisation of vegetables 14. Care and maintenance 15. Harvesting and Postharvest Handling 	<p>Crop Protection</p> <ol style="list-style-type: none"> 1. Field Diagnosis in Vegetable Crops 2. Diseases Identification and Management 3. Insect Pests Identification and Management 4. Integrated Pest Management 5. Safe Use of Pesticides and Knowing About Pesticides 6. Weed management 7. Fungal Diseases - Crop Protection 8. Bacterial Diseases - Crop Protection 9. Viral diseases identification, management and control 10. Arachnids identification management and control 11. Insect vectors 12. Insect borers 13. Insect chewers



f. Training other service providers

In order to widen the scope of knowledge transfer, EWS-KT organises technical training and back stopping to a number of potential service providers such as government extension, state agricultural universities and like-minded NGOs. Besides the normal capacity building it also helps to standardize our recommendations so that the farmer is not confused by different messages.



5. Outreach and Impact

Over 2019, EWS-KT directly reached 104,236 farmers through field based training activities. Direct outreach means reaching people through demos, training and field days (ie face to face contact). On average, gender balance was 40% women, 60% men. This brings the total number of farmers trained over the last 5 years to more than 300,000.

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2023
Bangladesh	0	0	0	0	0	5,000	15,000	25,000	25,000	25,000
Cambodia	1,640	2,113	6,117	9,000	9,000	12,000	15,000	15,000	15,000	15,000
India	0	789	6,261	14,000	14,098	22,500	35,000	55,000	75,000	100,000
Indonesia*	9,023	12,218	7,933	10,705	21,968	24,800	25,000	25,000	25,000	25,000
Myanmar	5,448	11,008	11,968	15,000	19,714	20,000	20,000	20,000	20,000	20,000
Nigeria	0	0	0	0	3,189	14,400	25,000	40,000	50,000	50,000
Philippines	3,493	3,406	4,730	13,061	14,260	15,000	15,000	15,000	15,000	15,000
Tanzania	2,436	5,515	9,816	16,685	6,237	11,200	15,000	15,000	15,000	15,000
Thailand	300	800	1,284	6,000	0	0	0	0	0	0
Uganda	0	0	0	8,000	15,770	15,000	15,000	15,000	15,000	15,000
Others	0	0	1,374	0	0	2,500	5,000	15,000	15,000	15,000
	22,340	35,849	49,483	92,451	104,236	142,400	185,000	240,000	275,000	300,000
	304,359 farmers trained over last 5 years					1,142,400 farmers in coming 5 years				

*Financed and managed through Yayasan Bina Tani Sejahtera

A survey of farmer managed demo farms over 2019 indicated an average net profit of U\$283 per crop cycle on 500sqm plots. A total of 2,492 plots were observed over a one year period to ensure that seasonal yield and price fluctuations are represented. Considering that most farmers plant a total of 0.5Ha over the course of the year, this indicates a potential **annual net profit from farmers adopting improved production practices of U\$2,838**

	No of demos surveyed	Actual Average Net Profit for one crop cycle on 500sqm	Potential Annual Net Profit*
Cambodia	953	U\$353	U\$3,526
Philippines	129	U\$201	U\$2,005
Myanmar	692	U\$308	U\$3,080
India	238	U\$197	U\$1,970
Tanzania	96	U\$372	U\$3,718
Uganda	338	U\$365	U\$3,650
Nigeria	46	U\$192	U\$1,919
Total	2,492	U\$283	U\$2,838

*considering most farmers produce on average half hectare over one year



6. Harness the use of data

We recognize the importance of steering our activities and developing a strong evidence-base for our programs through the use of solid field data. We are constantly refining our monitoring, evaluation, and learning methods and tools.

EWS-KT believes that a strong Monitoring, Evaluation and Learning system is essential to demonstrate the impact of program activities, provide actionable data during implementation to promote adaptive management and distill learning for future programs and partnerships. All project teams are now using an advanced app-based farm management and monitoring system to track activities and record expenditures and returns on each demonstration farm. This information is used to evaluate the potential profitability of different crops over different seasons, provide detailed information of farmers participating in training events, tracking regularity of participation, gender, and curriculum topics covered as well as helping with tracking the adoption of improved practices amongst groups of farmers. Please click to access testimonies from our team on how improvements to the App is helping their work:

[Watch some testimonies about the KT app in this video.](#)



7. Use of digital media

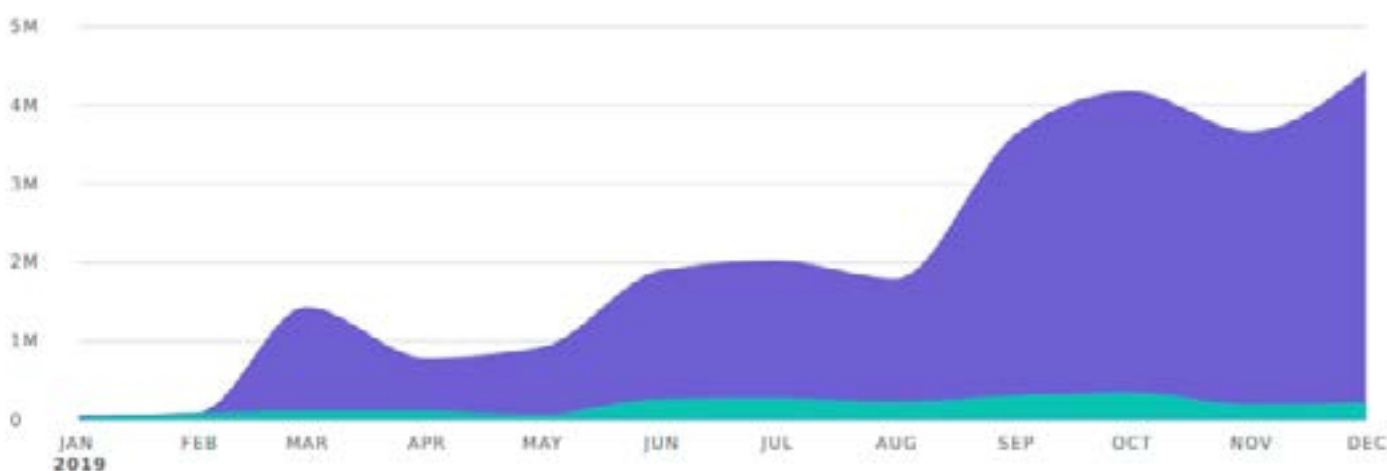
In the past year we have been engaging more systematically into digital media to share knowledge more widely in farming communities. Although this cannot substitute field-based activities, digital media is an attractive opportunity for farmers to strengthen their knowledge within project areas as well as widening the knowledge network to farmers outside of the project. As well as supporting knowledge exchange in social media groups. Over 2019 we attained an outreach of over 3 million through Facebook. View this link to get a [overview of EWS Knowledge Transfer on Facebook in 2019](#)



Facebook Impressions

Review how your content was seen by the Facebook community during the reporting period.

Impressions Breakdown, by Month



In 2019 EWS-KT started discussions with Funzi (a company with unique expertise in mobile business, education, and technology) on new approaches to learning through mobiles. Content is being finalized for a pilot project in mobile in Nigeria. This course will be ready in Hausa and English in early 2020.

In the coming year we will support an intern to study the impact of digital outreach in Thailand. Collaboration with the commercial company to share technical information on the same channels (FB, Line @) has seen positive results. The study will see if and how this can be replicated in other countries (especially Philippines and Cambodia).

A new position of Digital Media Coordinator will start in India in early 2020. This will be the first time we appoint a dedicated person at country level to moderate local social media communities. As well as driving wider outreach this will also enable us to monitor and analyze outreach numbers and impacts through tune-in campaigns.

From this positive start in digital media we will now include digital media KPI to all country teams as from 2020. This will be tracked through a New Social Media monitoring tool will help with better insights on our performance; enabling improved analysis and reporting as well as identifying areas for improvement.

EWS-KT has started exploring using local radio as a medium that can be used to teach farmers about improved techniques in Nigeria and Uganda. The results of regular broadcasts are very positive; with many callers bringing their problems and asking about where they can get more information. With the widespread use of mobile phones, farmers join on air by calling or texting. This makes radio a very interactive medium.

People living in rural areas gather around a radio set to listen to the broadcasts. When the programme ends, discussion happens. “Rural people immediately recognized themselves in this new means of communication – which spoke about their problems, in languages that they could understand,” explains Mathieu Bonkougou, who has worked at Burkina Faso’s national radio station for several years.

A study will be conducted in Nigeria to measure the impact of the on-going broadcasting on outreaching farmers and adoption of new techniques. Further radio programs and podcasts will be developed in Nigeria, Tanzania and Uganda over 2020.

8. Country Summary Reports

a. Cambodia



Actual performance 2019			
No. of demonstrations	953	EWS-KT funds	\$58,124
Average ROI from demonstrations	U\$353 (500sqm)	Partner funds	\$123,798
No. of training events	579	Total funds	\$181,922
No. of technical field days	213	Staff	13
No. farmers reached in field events	9,000		

b. India



Actual performance 2019			
No. of demonstrations	238	EWS-KT funds	\$147,232
Average ROI from demonstrations	U\$197 (500sqm)	Partner funds	\$208,624
No. of training events	448	Total funds	\$355,855
No. of technical field days	124	Staff	24
No. farmers reached in field events	14,098		

c. Myanmar



Actual performance 2019			
No. of demonstrations	692	EWS-KT funds	\$50,403
Average ROI from demonstrations	U\$308 (500sqm)	Partner funds	\$368,894
No. of training events	431	Total funds	\$419,377
No. of technical field days	107	Staff	25
No. farmers reached in field events	19,714		

d. The Philippines



Actual performance 2019			
No. of demonstrations	129	EWS-KT funds	\$207,553
Average ROI from demonstrations	U\$201 (500sqm)	Partner funds	\$69,589
No. of training events	137	Total funds	\$277,143
No. of technical field days	17	Staff	18
No. farmers reached in field events	14,269		

e. Nigeria

A major project to transform the vegetable markets of Nigeria commenced in July 2019 with support from the Dutch Government. The first farmer engagements, demonstrations, agro-dealer and market engagements were established in Kaduna state. By the end of the year, a team of field staff had already been recruited to commence similar work in Kano State.



Actual performance 2019			
No. of demonstrations	46	EWS-KT funds	\$62,290
Average ROI from demonstrations	U\$192 (500sqm)	Partner funds	\$109,414
No. of training events	229	Total funds	\$171,704
No. of technical field days	27	Staff	19
No. farmers reached in field events	3,180		

f. Tanzania

A new Knowledge Transfer team, established on the backbone of SEVIA, was established in Tanzania. The first demos of the new dispensation was established in the Iringa Region (South-west Tanzania), with Tomato being the lead crop of the first plantings. By the end of the year, a second wave of TFOs had been recruited to start work in Kahama District of Shinyanga Region (Lakezone in North-west Tanzania).



Actual performance 2019

No. of demonstrations	96	EWS-KT funds	\$67,004
Average ROI from demonstrations	U\$372 (500sqm)	Partner funds	\$
No. of training events	151	Total funds	\$67,040
No. of technical field days	30	Staff	7
No. farmers reached in field events	6,237		

g. Uganda

Over the past two years, EWS-KT has established field programs in Northern Uganda in cooperation with Integrated Seed Sector Development. In 2019 knowledge transfer focused in Lira, Gulu, Arua (West Nile), Kapchorwa, Jinja, Kasese and Kabarole districts. Demonstrations in the Refugee resettlements in West Nile particularly attracted wide attention. This work has had significant effects on the development of value chains in Northern Uganda.



Actual performance 2019			
No. of demonstrations	338	EWS-KT funds	\$16,898
Average ROI from demonstrations	U\$365 (500sqm)	Partner funds	\$408,586
No. of training events	2129	Total funds	\$425,485
No. of technical field days	321	Staff	21
No. farmers reached in field events	15,770		

9. Partnerships



EWS-KT's core operational costs are funded through a fixed percentage of EWS seed sales. To cover programmatic costs and enable wider outreach we leverage additional resources of like-minded organizations.

While we welcome contributions of funds, we also look for partnerships that reach beyond financial support. Complementary skills such as community mobilization, access to finance, conflict sensitivity, targeted youth and gender inclusion, and broad-based livelihood development bring significant added value to our work. Over 2019, EWS-KT had the following partnerships:

Cambodia

-
- HARVEST II (funded by USAID, Feed the Future)
- Mekong Inclusive Growth and Innovation Program (MIGIP) by Swisscontact
- The Cambodia Horticulture Advancing Income and Nutrition (CHAIN), implemented by SNV

India

-
- Netherlands Enterprise Agency (RVO)
- Solidaridad (through SDGP of the Government of The Kingdom of The Netherlands)

Myanmar

- DaNa Facility (funded by DFID)
- Mennonite Economic Development Associates (MEDA)
- VegIMPACT (funded by Netherlands Enterprise Agency)
- VegCAP (funded by Netherlands Enterprise Agency)
- ICCO (funded through the DaNa Facility, DFID)

The Philippines

- Australian Centre for International Agricultural Research (ACIAR)
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)+Nestle
- World Wide Fund for Nature (WWF)+National Grid Corporation of the Phils (NGCP)
- Cooperative for Assistance and Relief Everywhere (CARE) Philippines.
- Catholic Organization for Relief and Development Aid (CORDAID)

Uganda

- Integrated Seed Sector Development (ISSD) Programme (partnership with Wageningen Centre for Development Innovation)
- Bioversity International
- Netherlands Embassy of Uganda

Nigeria

- SDGP of the Government of The Kingdom of The Netherlands (in partnership with Solidaridad; Ministry of Agriculture, Kaduna State; Ahmadu Bello University; Wageningen University and Research)

Strategic Partnerships

In addition to country-focused partnerships, EWS-KT continues with its long term strategic partnership with Wageningen University to foster research and knowledge development. Through Wageningen Plant Research we have received high-level technical support which ensured sharing the best quality advice with farmers. Wageningen's experts continued to ensure that our crop guides and technical recommendations are up to date information on the use of pesticides and fertilizers. This supports our vision to promote sustainable and profitable vegetable production with smallholder vegetable farmers.

10. Case Studies



Picture courtesy of Roger Reuver

In 2018 EWS- Knowledge Transfer and the ISSD Plus program of Wageningen University & Research started a partnership to introduce better horticultural skills to northern Uganda. A unique case study and video have been developed to document the uptake of improved knowledge in the farming communities - as well as offering insight to the potential future.

Some key findings of [“Adoption processes of good horticultural practices in northern Uganda”](#), undertaken by Wageningen Centre for Development Innovation shows:

- More than 400 farmer training sites established
- 7000 farmers were trained (half of them women)
- Over 30% of farmers had already started adopting some new practices
- Farmers are able to earn 5X their investment in the dry season.

The case study looks closely at how and why adoption takes place and documents farmers' impressions - many of whom are for the first time now profitably growing vegetables. A short video can be viewed [here](#)

Another case study jointly supported by EWS-KT and Wageningen Centre for Development Innovation, looked at the potential value of vegetables to smallholder farmers in Tanzania. The case study can be downloaded from the following [link](#).

11. Some of our farmers success stories

Tanzania



NEVER TOO LATE TO ADOPT

Misana Taratibu (63) has been a vegetable farmer since 1983. Misana lives in Ngogwa village in Kahama District and relies on farming as his major activity. He grows tomato, sweet pepper and African eggplant. Poor pest and disease control, low quality of produce and poor access to the market were the most common challenges faced by Misana over the years.

In September 2018, Misana attended SEVIA training organized by Benjamin Masurura (then SEVIA extension officer based in who would soon become an East-West seed KTO). Major topics presented on the training were seed selection, fertilization and crop protection. As from October 2018, Misana hosted a sweet pepper demo, which was successful. “This was a good start to put knowledge into practice. I now believed I could overcome all challenges I faced in the past”, Misana commented.

In February 2019, Misana cultivated tomato and sweet pepper in about half an acre plot. “By adopting better farming techniques, I doubled my profit by getting 1,700,000 Tshs”, the farmer said. Misana used his additional profit to buy more cattle (20 goats and 2 cows). “This is the biggest investment I have ever done at once. I see myself somewhere far in the near future”, he said.



Misana is also helping other farmers by giving appropriate advice and support on dealing with their crops. He is looking forward to establishing a vegetable training center for farmers. “I am inspired by my own transformation. I would like to see the same changes in other farmers as well”, he said.

Uganda

Young farmers in action



At 25 years of age, Pirio Constantine is much younger than most farmers in Uganda but he has already become an inspiration to other farmers. The average age of those who grow crops in the East African nation is 54, below the African continent's average of 60.

In just one season his field, less than a tenth of an acre in size, is now brimming with healthy cabbages where tobacco once grew.

This drastic change has attracted attention from his neighbors, in the Arua District of the West Nile Region, who come to him for advice on vegetable farming despite his relatively young age.

His family have been a part of the [Nutrition and Income Generation Intervention](#), a collaboration between Wageningen University and Research and East-West Seed Knowledge Transfer. "Nowadays money finds me at home because the whole community knows me as the main vegetable producer of all seasons," says Constantino

Nigeria

Sisters are doing it for themselves



With knowledge transfer, tomato yields are increasing up to ten-fold in Nigeria. One of the communities experiencing this is Gefe Community, Kaduna State. In addition to growing cereals during the rainy season, Mrs Martha Maitala (in red t-shirt), a native of the Gefe, has been growing okra in 400sqm of land. With the income from okra sales she has been contributing 30-35% of the household income. She buys food and clothes and even assists the husband to pay school fees for the children. For a long time she was hesitant to grow tomatoes because of challenges of pests and diseases. This all changed when she attended a field day of Mr Shitu Danzakara, a key farmer from the same community.

Mrs Maitala was fascinated by 4 things she saw from the demo plot during the field day; (1) the plant height, (2) the vigour and number of fruits each cluster carries, (3) how the trellising protected the fruits from touching the ground and (4) how strong and fresh the fruits looked.

“I have never seen a cluster of tomatoes like this one,” Mrs Maitala said. “Now I am willing to give tomato production a try,” she added.

India

A partnership that changed his life



The rain simply wasn't falling and farmer Arun Mohan Pote (25) was losing money. His land, located in the village of Dhanora, Hingoli District in Maharashtra, India, was focused on cotton, soybean and wheat.

Rainfall and access to other water sources in this area is a constant challenge for farmers such as him. This means that vegetables, especially in the dry season, can fetch significantly higher prices at the market.

Profitable smallholder farming

But Arun still had no way of watering his crops or how to select which vegetables would grow well under dry conditions. Everything changed when he teamed up with East-West Seed Knowledge Transfer (EWS-KT), which aims to increase the skills of smallholder farmers to allow them to increase their yields and improve their livelihoods.

New techniques

EWS-KT's technical field officer Prakash Lakhade helped Arun learn how to implement drip irrigation on his farm. The two also closely looked into market research and, after much discussion, identified the three best crops to grow during winter, namely: Bitter gourd, Okra, and Ridge gourd. They got to work and implemented EWS-KT's low-cost farming technologies, all of which were quite new to Arun, including: Seedling production, trellising, raised bed preparation, pruning and fertilization

From bitter gourd, Arun saw a 986% return on investment in just one season with a net profit of over ₹94 000 (Rupees) - about \$1,350 USD - on an area of just 0.2 acres.

To put this into perspective, he previously achieved net profits of around ₹6 000 per one acre of cotton and ₹3 000 for one acre of soybean.



Regarding okra and ridge gourd, he received a net profit for both of over ₹37 000 and an ROI of 436% and 981% respectively.

Delighted with the results, Arun wants to invest some of the profits back into building a large well on his land so that he can grow more during the dry seasons. He remains a "key farmer" for East-West Seed Knowledge Transfer and shares what he has learned with other farmers in his community.

Myanmar

Advancing women's role in sustainable farming: going beyond slogans

Daw Mya Ngwe, 55, from Myanmar supports her family through vegetable farming. While she does not have children herself, she supports the children of her siblings especially with their education. Before she became a vegetable farmer, she grew field corn, sugarcane and flowers.



Then, a few years ago, she attended training on profitable and sustainable farming techniques. She picked up simple techniques like using plastic mulch to prevent weeds. She started producing sweet pepper. Compared to sugarcane, for which she could only earn USD 310 per plot, Mya Ngwe is now able to earn more than double. One plot resulted in a net profit of USD 780, while the investment costs of both crops were relatively similar.

Mya Ngwe started to reinvest her additional income into growing more sweet pepper and has expanded her farming business to hot pepper as well. She is able to offer more support to her nieces and nephews with their school fees. As is often quite usual in Myanmar, Mya Ngwe always remembers to offer some of her earnings to the temple.

The success story of Mya Ngwe is an inspiration and a model for development for many other women farmers in Myanmar. A project called “Advance Myanmar” aims to catalyze the creation of a commercial seed sector in the country’s Kayin State, with particular focus on female farmers.

The cooperation seeks to develop a new market for commercial seeds, develop the vegetable sector in Kayin State, Myanmar, and demonstrate the effectiveness of engaging female farmers in agri-business. Launched through a partnership between East-West Seed and MEDA, the project aims to build a commercial case for engaging women farmers as an effective shared value model for agri-businesses.

The female lead farmer model employs the same methodology as the classic key farmer model employed by East-West Seed in all its Knowledge Transfer (KT) programs, but selects women farmers for training. Early research demonstrates that women farmers are more likely than male farmers to share learning with others in their community. ADVANCE Myanmar targets 90 lead farmers, of which 60 will be women, over the 2-year project period. They will be trained to improve their knowledge and practices in growing vegetables and forming new market linkages for the sale of their products.

The acknowledgement of women’s role in farming is not a new thing. There is a consensus among development experts of the need to create more opportunities for female farmers to contribute to sustainable farming systems. A recent report by the CGIAR concludes that increasing gender equity is a must-have to achieve sustainable intensification of agriculture. A UN study puts the spotlight on the role of women as custodians of sustainable traditional agricultural practices that maintain biodiversity, which holds the key to food security.

12. FINANCIAL SUMMARY

East-West Seed Knowledge Transfer		Financial Statement 2019	
	Notes	USD x 1.000	
Balance sheet		2019	2018
Current Assets			
Committed donations East-West Seed Group		1,428	1,117
Committed donations Partners		364	161
Total Current Assets		1,792	1,278
Non-Current Assets			
Equipment		13	11
Vehicle		35	61
Total Non-Current Assets	1)	48	72
Total Assets		1,840	1,350
Liabilities & Capital			
Liabilities			
Projects in progress		1,009	815
Accrued expenses		186	0
Short-term liabilities		597	463
Total liabilities		1,792	1,278
Capital		48	72
Total Capital		48	72
Total Liabilities & Capital		1,840	1,350

East-West Seed Knowledge Transfer

Financial Statement 2019

Notes

USD x 1.000

Statement of Income and Expenses

2019

2018

Income

Funding by EWS Group	2)	1,865	1,869
Funding by Partners	3)	1,289	570
Funding by Partners in kind		1,411	1,090
Total Income		4,565	3,529

Expense

Labour costs	4)	1,709	1,280
Communication costs		53	0
Travel and stay		468	463
Training costs KT staff		38	27
Training costs farmers		307	188
Consultancy fees		219	201
Licenses fee		23	0
Tools and equipment		20	32
Office supplies		74	63
Others costs		4	11
Depreciation non current assets		31	40
In kind expenses Partners		1,411	1,090
Total Expenses		4,357	3,395
Excess of income over expenses		208	134

East-West Seed Knowledge Transfer

Financial Statement 2019

Notes

USD x 1.000

Note

1) Non current assets

Purchase value 31/12/2018	241,739
Accumulated depreciation 2018	(169,480)
Book value 21/12/2018	72,259

Purchase value 31/12/2018	241,739
Purchases 2019	7,058
Accumulated depreciation 2018	(169,480)
Depreciation 2019	(30,949)
Book value 21/12/2019	48,368

Depreciation period

- equipment 36 months
- vehicles 60 months

2) Funding by EWS Group is either in cash or in kind.

3) Partners apply for cooperation with projects which are initiated by East-West Seed Knowledge Transfer. Most projects run for over 1 year. For the reporting year, Partners have committed to a contribution in kind with a value of USD 1,411.

4) Staff is on the payroll of East-West Group companies. The counter value is considered as contribution in kind.

Other

The Board of Trustees consists of 4 members. Total compensation for costs of the Board is \$ 30.000 for the year.

13. Upcoming developments (2020 and beyond)

With the growth that we are experiencing in KT, we have seen it fit to split our structure into three operational regions; Africa, Asia and India.

In this regard, in January 2020 we look forward to welcoming our first Regional Head of EWS-KT in Africa, Elijah Mwashayenyi. Elijah is a former SEVIA Director who brings 30 years of experience to EWS-KT. Still in Africa, we will also welcome Business Analyst for Africa, Fortunata Robinson Ngalali, former SEVIA Accountant.

We are equally excited to welcome on board Sathiyabama Baskaran as EWS-KT Head India. Her long experience in managing NGO projects as well as with corporate CSR will help ensure that knowledge transfer remains in its pre-commercial setting. This new position will enable the growth of our pre-commercial knowledge transfer team and provide strategic direction, vision and leadership to all projects in India.

In order to ensure that country teams have the capacity to deliver the best quality support to an increasing number of smallholder farmers in the countries where we operate, EWS-KT is looking forward to working with Vindhya Iyer as our Human Resources Business Partner. Her long international experience will enable us to grow our knowledge transfer operations in a multicultural environment.

Following intensive preparation, EWS-KT will start a new operation in Bangladesh in early 2020. This will be led by our new KT Manager Yasin Kabir.

14. Key EWS-KT contacts

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