Today the family owns 2.5 hectares of land 1.2 hectares of which are under OFSP seed multiplication. Mr. Osamba also rented another 0.6 hectares where Mrs. Osamba is growing OFSP for commercial root production.

As a member of GUSSGA, Mr. Osamba got an opportunity to interact with the policy makers in Siaya County who assisted in promoting OFSP in the whole county. The promotion activities helped to create demand for OFSP roots thereby translating to an increase in demand for quality planting material.

Due to the improved seed quality, root producers are now recording improved yields per acre. To date, the association includes over 200 seed multipliers (120M, 80F) and they have sold seed worth US\$ 30,000 to 800 root producers during the 2013 long rains season.

People have been willing to buy seed in large quantities as long as it is of good quality and free from pests and diseases. A total of 3.5 million vines of quality planting material were used to establish 100 hectares of roots within the project area. Root producers were also able to access planting material at the beginning of the rains.

"The life of my family has really transformed," says Osamba. "I am paying tuition fees for my son who is undertaking a masonry course at Ndere polytechnic and for two children in secondary school. I have also purchased two dairy goats and my wife has purchased three sheep. Funds from OFSP have helped us to buy 600 indigenous chickens, which are providing my family with eggs for home consumption and money for other household items. I recently bought 40 iron sheets and other building material for constructing a better house. My family is so happy that we will soon be living in a better house than our current grass thatched one. My status in the community has also improved as the Ministry of Agriculture extension staff and UCRC are using me as a trainer for other farmers. I am now linked to the root producers and processors in the OFSP value chain as a member of the seed thematic group while my wife is a member of the fresh root thematic group. While I am concentrating on seed farming, my wife is fully involved in commercial root production and small-scale processing".

"OFSP has improved my status in the village from a nobody to a community leader. The community is now looking at me as their advisor in OFSP farming. Our family is now united and a source of aspiration to many", says Millicent Majuma Osamba.

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Explaining rapid vine multiplication techniques at field day. (credit S. Mayanja)



Capturing Our Learning: An interactive "write-shop" (facilitated by Well Told Story) was held to capture participants stories. Participatory role-plays explored what happened in different countries along the value chain. Divided into 3 acts the role plays portrayed the problem being faced; the solution; and the new reality. A mock radio phone-in show was used to tease out technical issues. Commentators and facilitators identified significant "ah-haa" moments, probing actors and directors for more information, allowing commentators to explore how things happened differently across countries. Recording the information was a crucial part of the process! Participants took notes, spokespeople for each play recorded the action and "ah-haa" moments were recorded on flipcharts. By the end of 2 days, we had stories with heroes and data which danced. Countries had also deepened their understanding about their own value chain activities, and had shared valuable experiences.



Until 2008 the Osambas had been growing maize on their 2.5 hectares farm but they were harvesting only 5 bags per hectare, which could not provide adequate food and meet the other needs of the family. The Osambas' land was poor and ill-suited to maize production. They could not afford to buy

the right maize seed for the conditions and maize also requires a great deal of fertiliser.

for orange-fleshed sweetpotato in East and Central Africa

Seeds of Change: A shining investment for smallholder farmers in Ugunja and

Gem sub-counties in Kenya

Osamba family of

Osamua Idiliage,
Semenya Village,

In the early 2000s the

Ugunja Sub-County in

Kenya had their lives

changed after becoming

successful small-scale

orange-fleshed sweet-

multipliers. Mr. William

Osamba, 52, is now able

potato (OFSP) seed

to feed his family of

children's school fees.

nine and pay his

Simultaneously Mr. Osamba's wife Millicent Majuma was also planting white-fleshed sweetpotato on a small piece of land allocated to her by her husband. It proved a good fall back in hard times; the sweetpotato was mainly consumed at home but she occasionally sold it in the local market when she had a

"I used to live a miserable life before venturing into OFSP seed production," says Mr. Osamba. "I could not buy food and pay school fees for my children. I used to earn a living by working as a casual labourer on neighbours' farms". According to Mrs. Osamba the community used to look down upon their family.

In 2008 Mr. Charles Ogada, working with the Ugunja Community Resource Centre (UCRC) as a programme officer, identified Mr. Osamba as a potential community resource person for the Organic Agriculture project they were conducting in the larger Siaya County.

Mr. Osamba became a member of the Simenya cluster that had been formed to address food insecurity problems in their village through focussing on integrated organic agriculture farming techniques. Through these interventions Mr. Osamba



This Learning Case is a "work in progress" developed under the project Scaling up Technologies in Orange Fleshed Sweetpotato Using the Agricultural Innovation System (AIS) to Address Food and Nutrition Security in Eastern and Central Africa". The project duration was from February 2012 to October 2013 with funding provided through the ASARECA Multi Donor Trust Fund. This regional project operated in target districts in Kenya, Tanzania and Uganda. The overall project was led by the Lake Zone Agricultural Research and Development Institute (LZARDI) Tanzania with technical backstopping from the International Potato Center (CIP), sub-Saharan Africa Regional

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and his family became more food secure and developed the interest and confidence to explore other ways to improve the family income.

Mr. Osamba first became aware of OFSP when the Simenya cluster group members visited Gamalenga women's group in the neighbouring Vihiga County. There he learnt that farmers can earn income not just from selling roots but also from the sale of OFSP seed. As a result, he bought three bags of OFSP vines from Gamalenga, which he planted on a quarter acre of infertile and neglected land on his farm in Simenya. Although the cultivation of sweetpotato in the village had previously been thought of as 'women's work', it was Mr. Osamba himself who planted and weeded the new crop.

He lost this seed after only one season as he did not have the necessary skills in seed conservation and disease control. Mr Osamba's interest in OFSP seed production however did not die. Assisted by UCRC, he did further training and became more expert as part of a project now known as "Scaling up Technologies in Orange Fleshed Sweet Potato Using the Agricultural Innovation System (AIS) to Address Food and Nutrition Security in Eastern and Central Africa".

Like Mr. Osamba, other farmers in Gem and Ugunja Sub Counties have for generations grown white- and yellow-fleshed sweetpotato as a major food security and cash generating crop. These varieties however contain low levels of pro-vitamin A, take long to mature, and when cooking need more water and take more time to cook than OFSP.

UCRC used this comparative advantage to encourage people to switch to a different colour of sweetpotato, and enjoy greater nutritional benefits.

Once they were informed about the advantages, the recent advent of additional OFSP varieties has generated great interest among farmers in the area due to its nutritional benefits and resilience. This is particularly important because of the high malnutrition rates and Vitamin A deficiency levels in the two sub-counties. The poverty level in the County - estimated at 58.2% - has traditionally made it impossible for most families to buy a key source of Vitamin A – animal meat – which is too costly. Without Vitamin A children become malnourished, have reduced disease resistance, impaired growth and overall increased mortality. In addition, Vitamin A deficiency can lead to blindness.

It is possible for people in Simenya to grow enough food to sustain themselves on their smallholdings but only if they grow the right kind of crops. There are problems however: even when convinced of the merits of OFSP, it was hard for farmers to grow it in the area because of four problems that UCRC identified in a survey conducted in Ugunja and Gem Sub-Counties in 2007 to assess the status of OFSP and factors contributing to its adoption.

 It was hard to get hold of the correct planting material and this had slowed down the uptake of OFSP. Although some earlier projects had introduced OFSP in the county, its spread was affected by the absence of a reliable seed system.



Osamba multiplication plot. (credit R. Adipo)

- Secondly, for well-established cultural reasons, selling sweetpotato seed was a rare practice and farmers found it unthinkable to engage in seed production as a business.
 Planting material was disseminated through farmer-tofarmer exchanges. Most sweetpotato growers were getting planting material from their previous crop or freely from neighbours.
- Thirdly, the dry seasons from December to March meant that planting materials were never ready at the beginning of the long rains.
- Importantly sweetpotato production has traditionally been the preserve of women among communities in Siaya and Western Kenya in general. Given the patrilineal land ownership and control system, the acreage that was under sweetpotato was insignificant in comparison to that allocated to other crops.

To mitigate the shortage of clean OFSP planting material and show the importance of women in the OFSP value chain, the two year AIS project was launched in Kenya in May, 2012. Its main aim is to promote the production of OFSP in Gem and Ugunja sub counties of Siaya County using a participatory market chain approach (PMCA).

UCRC and KARI-Kakamega provided initial planting material of the OFSP variety Kabode to seed multipliers. The material was multiplied by 17 famers during the first year and then extended to a further 42 farmer seed multipliers in the second year. KARI-Kakamega provided training to the emergent seed multipliers to increase their capacity to produce quality seed, control pests and diseases and how to conserve planting material during the dry season. The PMCA helped to strengthen interaction among value chain actors by using a flexible three-stage participatory process which improved communication, built trust and facilitated collaboration among actors. The analysis helped actors to jointly identify, analyse and exploit new market opportunities for OFSP which would benefit both men and women.

The PMCA seed thematic group used song to encourage a participatory approach showing that women are also involved in value chain activities. (credit R. Adipo)



Mr Osamba became a member of the seed thematic group, which was formed by the value chain actors to promote OFSP planting material multiplication and marketing. The seed group brought all links in the value chain together men and women seed multipliers and farmers. This act of having all the actors together in the seed thematic group has enhanced collaboration and trust among the members. They freely share information and have constructive interaction. This has brought about the empowerment of the women in the group who had been left behind in the control of resources especially land and sharing of benefits from the sales. The group has taken up promotion by using traditional folk songs to pass on the message about nutritional and commercial benefits of OFSP with focus on women and children who are the most vulnerable. Women are the ones taking lead when it comes to what is to be cooked in the household and their involvement in the group has meant that OFSP is taking a position in family diets and thus curbing food insecurities. UCRC and KARI have discovered that by using song and encouraging a participatory approach, women are not excluded from the value chain, which brings knock on effects to food security.

Mr. Osamba's membership of the thematic group gave him an opportunity to interact with the root producers, processors, traders, researchers and extension agents. As a member of the thematic group he was able to assess the demand for planting material, as well as where and when it would be needed. This in turn permitted him to plan his seed production calendar in order to maximise profit.

The thematic group has now transformed itself into a registered association referred to as the Gem Ugunga Sweetpotato Seed Growers Association (GUSSGA) to champion the marketing and dissemination of planting material. GUSSGA formed a seed quality control committee, which ensured seed multipliers adhered to seed quality requirements. The association and facilitators carried out massive awareness creation on the nutritional and financial benefits of OFSP This was achieved through:

- · Village meetings (barazas),
- Elite Youth Entertainers Group who the project used to promote OFSP in the major markets in the project areas,
- Promotion materials such as stickers, calendars, aprons, t-shirts, national TV, field days and demonstrations.
- An interactive voice response (IVR) system which allowed OFSP actors to call a given mobile phone number to obtain information on planting material production and marketing.

Mr. Osamba also became a member of the GUSSGA as a seed multiplier. He obtained 15 bags of OFSP vines from UCRC, which he planted in a one acre plot despite his wife's protest. According to Mr. Osamba, his wife said that there was no need to spend the limited resources the family had on OFSP since nobody would buy cuttings from them as sale of planting material was considered a taboo by the community. She even told me "she would become a laughing stock for letting her husband do a 'woman's job'" said Mr. Osamba. But he proved her wrong!