

An illustration of a woman wearing a green headwrap and a purple shirt, sitting and feeding a baby with a spoon. The baby is holding a spoon and eating from a bowl of orange sweetpotato mash. They are surrounded by large, colorful sweetpotato tubers in shades of orange, yellow, and red. The background is a vibrant yellow with a pattern of colorful geometric shapes like circles, triangles, and squares in red, purple, and orange.

Sustainable sweetpotato pre-basic seed production Final Technical Report: June 2015 – November 2018



Fekadu Gurmu, SARI, Ethiopia
Sweetpotato Seed Systems Community of Practice: 10th
Consultation- Sustainable Pre-basic Seed Production – SGA
Progress Review. Nairobi, Kenya 13-14 November 2018

Table 1a: Varieties under pre-basic seed production: 2015-2018



	Varieties/year	Actual				Planned	
		2015	2016	2017	2018	2019	2020
	No. varieties						
1	Awassa-83			x	x	x	x
2	Hawassa-09					x	x
3	Kulfo	x	x	x	x	x	x
4	Tula	x	x				
5	Beletech	x	x				
6	Ukr/Eju-10 (Alamura)					x	x
7	Ukr/Eju-13 (Dilla)					x	x
8	SPK 004/6 (Vita)			x	x	x	x
9	SPK 004/6/6 (Kabode)			x	x	x	x
	No. cleaned up	3	3	4	4	7	7

Table 1b: Varieties in conservation/ maintenance 2015-2018



		Actual				Planned	
	Varieties/year	2015	2016	2017	2018	2019	2020
	No. varieties						
1	Guntute	OF	OF	TC	TC	TC	TC
2	Koka-12	OF	OF	OF	OF	OF	TC
3	Adu	OF	OF	OF	OF	OF	TC
4	Berkume	OF	OF	TC	TC	TC	TC
5	Tola	OF	OF	TC	TC	TC	TC
6	Beletech	TC	OF	OF	OF	OF	TC
7	Kyoyabwerere	TC	OF	OF	OF	OF	TC
8	Mae	TC	OF	OF	OF	OF	TC
9	Carrot C	TC	OF	OF	OF	OF	TC
10	Mayai	TC	OF	OF	OF	OF	TC
11	New Kawogo	-	TC	OF	OF	TC	TC
12	Wagabolige	-	TC	OF	OF	TC	TC
13	NASPOT-8	-	TC	OF	OF	TC	TC
14	Tomurabuka	-	TC	OF	OF	TC	TC
	No. cleaned up	5	4		3	7	14

Table 1c: Advanced clone release pipeline 2018 -2020.



				Planned	
	Varieties/year	Flesh colour	2018	2019	2020
	No. varieties				
1	Ukr/Eju-10 (Alamura)	Orange	x	x	x
2	Ukr/Eju-13 (Dilla)	Orange	x	x	x
3	SPK 004/6 (Vita)	Orange	x	x	x
4	SPK 004/6/6 (Kabode)	Orange	x	x	x
5	Pip/Nasp-15	White			x
6	Ukr/Nasp-6	White			x
	No. cleaned up		4*	4	6

* 1 & 2 are currently being cleaned at KEPHIS

Table 2: Pre-basic & basic seed production, sales and revenue 2015-2018.



		Actual				Planned	
Year	Unit length	2015	2016	2017	2018	2019	2020
Prebasic seed cuttings produced	30 cm	120,000	220,000	240,000	220,000	240,000	250,000
Basic seed seed cuttings produced	30 cm	500,000	2,800,000	2,100,000	2000,000	2,500,000	3,000,000
Prebasic seed cuttings sold	30 cm	Re-planted	Re-planted	Re-planted	Re-planted		
Basic seed cuttings sold	30 cm	400,000	1,350,000	2,001,887	505,400		
	Local currency						
Revenue from prebasic seed sales		Not for sale	Not for sale	Not for sale			
Revenue from basic seed sales		80,000	337,500	600,556	151,620		

- The importance of virus free planting materials as a source for SP seed production is institutionalized
- There was no any insect proof net tunnel at the start of SASHA-II project. Currently, there are 18 net tunnels that have been constructed with the support of CIP projects (SASHA-II, Irish Aid nutrition project & BPBL)
- Strong seed system is established i.e Cleaning (breeder seed), production of pre-basic seeds in net tunnels, production of basic seeds in isolated areas, production of QDS & certified seeds with the private multipliers

Outcome story...



- There was no any business plan for any crop seed production in SARI. Business plan developed for SP seed production, which is very much appreciated by SARI senior management.
- One virus resistant white fleshed sweetpotato variety has been released and it is under multiplication
- Participatory variety selection has been conducted with demo-plots and four best performing OFSP varieties identified and proposed for release

Outcome story...



- The Areka TC lab of SARI capacitated and got the attention of the regional gov't. Hence, the regional gov't constructed 5 additional screen houses with over 5 million birr (>USD 250,000)
- The TC lab researchers and screen house managers received theoretical and practical trainings at KEPHIS
- Local private SP seed producers received training that capacitated them to produce quality seeds
- Training was delivered to SARI researchers on sweetpotato disease and insect pest identification and use of ELISA kits
- Training of trainers delivered to over 500 agricultural experts in various regions in collaboration with Ministry of Agriculture



Insect proof net tunnels constructed for production of pre-basic seeds

Outcome story...



One of the demo plots

Outcome story...

**Roots of the old variety (kulfo) and
New variety Ukr/Eju-10 (Alamura), both from demo plots**



Outcome story...



Roots of a single plant of one of the candidate varieties



The flesh colour of the variety

Outcome story...

Thank you!