



Matured cassava in a flat land scape ready for harvest (Betty Adoch)

CROP ROTATION OF CASSAVA AND SOY BEAN ()

leno cam i potto

The improved variety of cassava known as Nafe14 is grown on a gentle slope. Animal traction was used to plough 43 acres of land. The land was initially used for growing soya beans. The cassava garden has some trenches dug across so to control flooding and soil erosion. By this a high moisture content is retained in the soil. This cassava species is drought resistant.

Crop rotation is the growing of different crops in the same piece of land year after year. This land user grows Cassava (*Manihota esculenta*) and Soy beans (*Glycine max*). in the field. The improved cassava variety (Nafe 14) was planted in 2015 on 43 acres during rainy season. The planting hole was dug 6 inches (square) in length and 6 to 10 inches depth, spaced at one meter distance.

The cassava stem is cut at 6 inch length and the planting may be done immediately as the holes are dug. If the area has termites then it should rain into the planting hole and later should stay for two days after which planting should be done. This is because the rain should seal the termites traces in order to protect the cassava stem from being destroyed by termites. Cassava growing protects the soil from erosion, is a source of income and protects land from wrangles.

Weeding is constantly done to control weed and to promote high yields.

: Agago Town council, Northern Uganda,

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2 (10)) : (approx. < 0.1

: 2015

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■

(> 50)

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Photo showing cassava crop and soya bean in the garden (betty adoch.)



(Betty Adoch)



Cassava

(-):

:1

:



, Wo: - Wt:



- Et: , Eo:



, Bh: / - Bc: , Bs: , Bl:

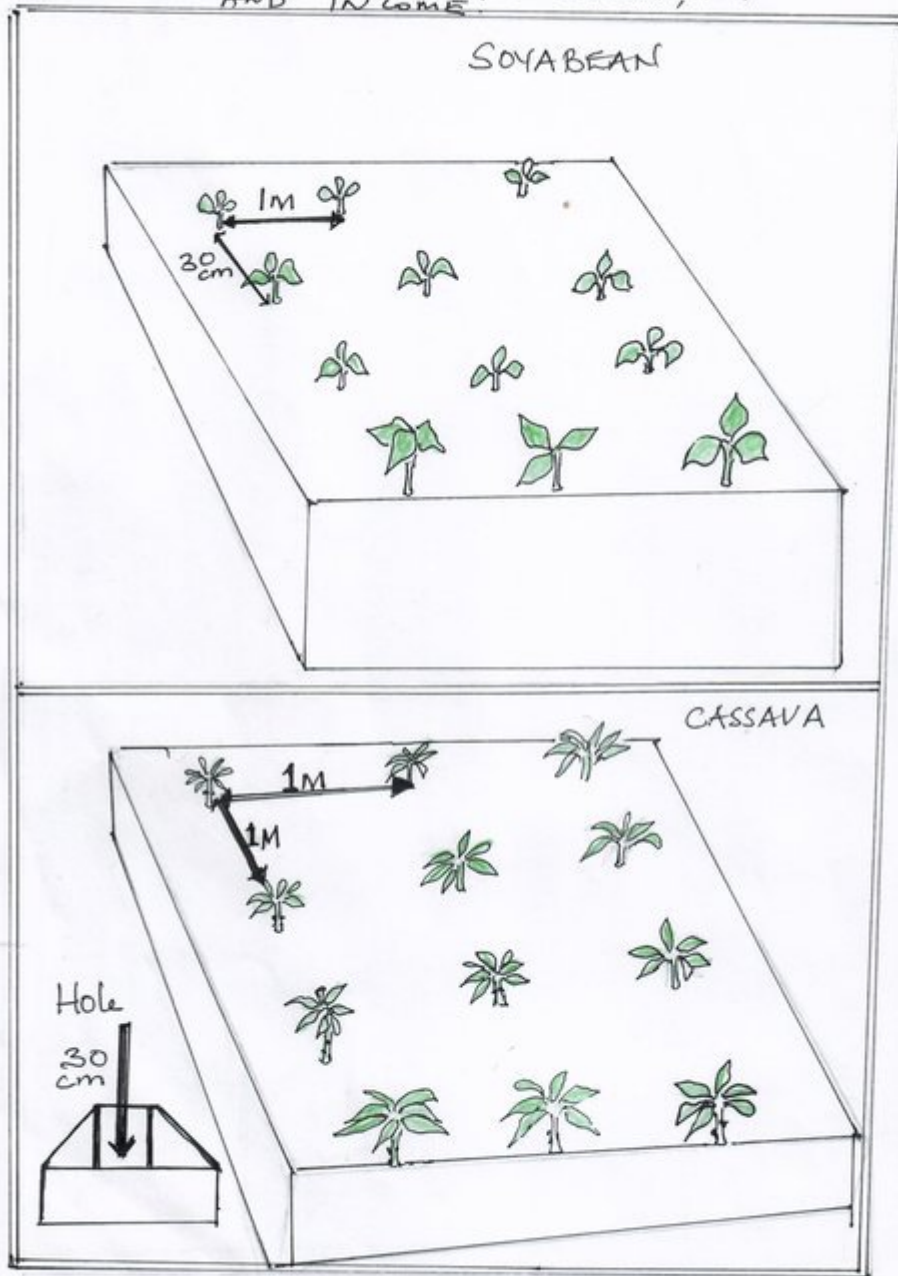
• SLM ()



SLM

/ , A5: - A1: / , A2:

CROP ROTATION: SOYA BEAN AND CASSAVA
FOR SOIL FERTILITY IMPROVEMENT, IMPROVED PRODUCTION
AND INCOME



By Prossy Kahem.

: Betty Adoch.

The improved cassava variety (Nafe 14) was planted in 2015 on 43 acres during rainy season. The planting hole was dug 6 inches (square) in length and 6 to 10 inches depth, spaced at one meter distance.

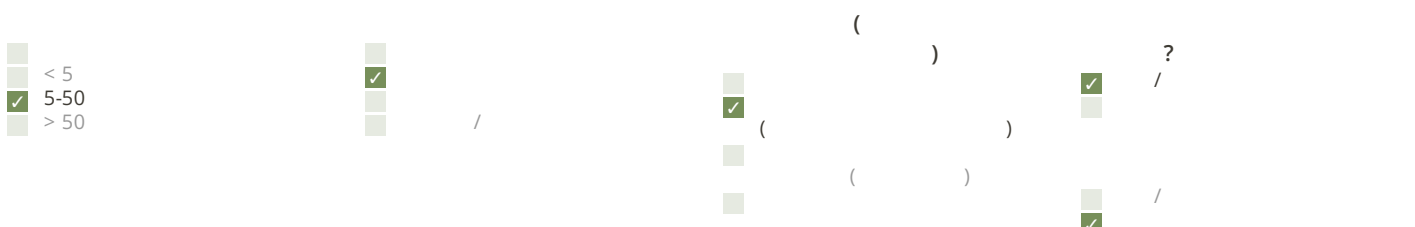
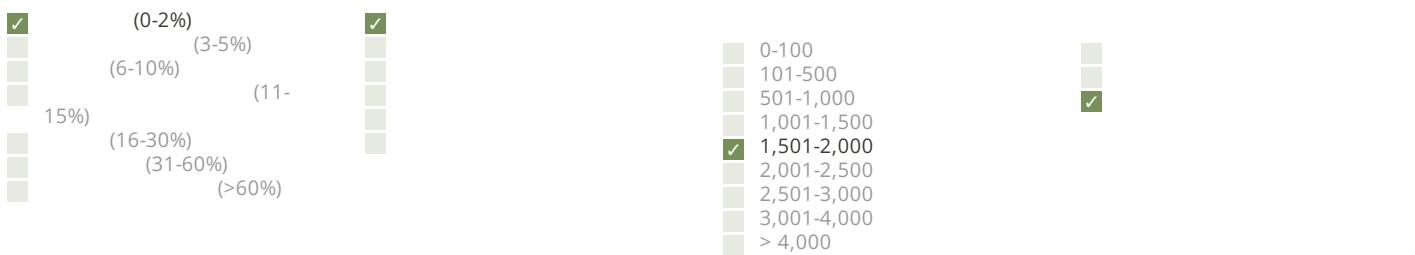
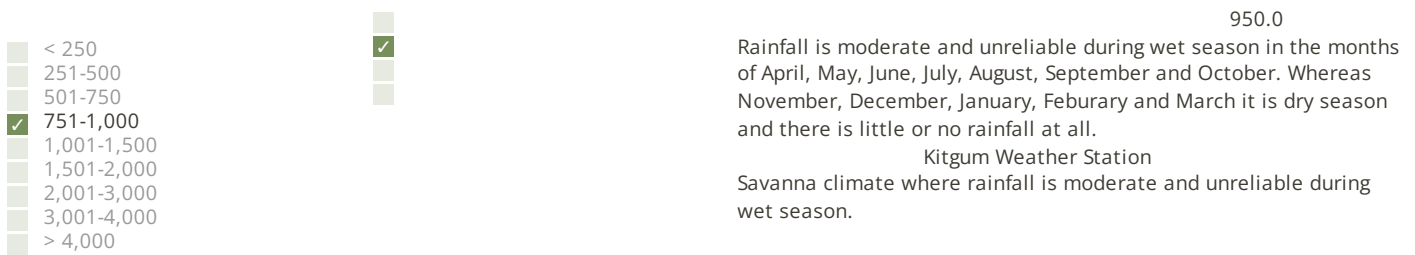
•		(
•	43 acres)	
•		UGX
•	() 1 USD = 3500.0
•	UGX	
•		3000shs

1. Acquiring cassava stems from Operation Wealth Creation (/ : dry season)
2. Clearing the land by tractor (/ : onset of rainy season)
3. Planting using hired labour (/ : rainy season)

			(UGX)	(UGX)	%
Hired labour	acres	43,0	48000,0	2064000,0	100,0
Tractor for ploughing	hours	48,0	20000,0	960000,0	100,0
Ox-plough	hours	48,0	20000,0	960000,0	100,0
Axes	piece	10,0	7000,0	70000,0	100,0
Hoes	piece	20,0	12000,0	240000,0	100,0
Cassava cuttings	acres	43,0	20000,0	860000,0	100,0
				5'154'000.0	

- Weeding (/ : wet season)
- Fire line (/ : dry season)

			(UGX)	(UGX)	%
Weeding	acre	43,0	2500,0	107500,0	100,0
Hoes	piece	60,0	12000,0	720000,0	100,0
Pangas	piece	60,0	7000,0	420000,0	100,0
				1'247'500.0	





SLM



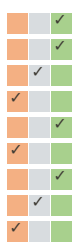
10-50%

10%

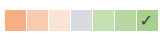
50%

- < 0.5
- 0.5-1
- 1-2
- 2-5
- 5-15
- 15-50
- 50-100
- 100-500
- 500-1,000
- 1,000-10,000
- > 10,000

(.)



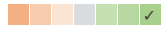
SLM



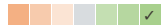
- SLM: low
SLM: high
Improved variety planted.
- SLM: Low
SLM: High
High yielding cassava Nafe14 variety is used.
- SLM: low
SLM: high
Cassava plantation requires less labor force after planting.
- SLM: low
SLM: high
Has greatly increased income generation.
- SLM: low
SLM: high
The farmer has other sources of income from cassava growing.
- SLM: high
SLM: low
The land user has assured source of income.

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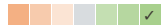
SLM /



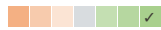
Cassava provides constant food supply to the land user.
 SLM: low
 SLM: high
 The farmer has learned about the importance crop rotation.



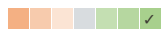
SLM: low
 SLM: high
 The cassava plants reduces the rate of evaporation.



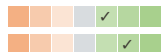
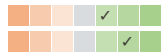
SLM: low
 SLM: high
 Cassava plant protects the soil from erosion and provides habitat to a variety of different plant species.



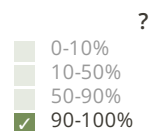
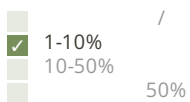
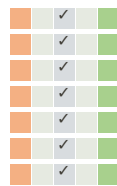
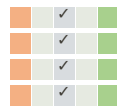
SLM: low
 SLM: high
 Variety of plant species exist in the garden.



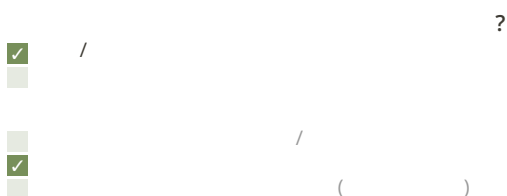
SLM: low
 SLM: high
 Cassava and other plant species exist.



Cassava has high demand due to hunger facing the communities.



15 households



Improved high yielding cassava variety planted to earn income.



- Very good at providing income after selling cassava and soya bean
- Very easy to replicate
- Source of employment for both small, medium and large scale farmers.

- Invites thieves during hunger period Tight security in the garden
- The variety take long to mature
- Cassava is prone to disease Spraying with herbicide
- Expensive to establish and maintain the garden Employing low costs labour

betty adoch

Editors
JOY TUKAHIRWA
Kamugisha Rick Nelson

Udo Höggel

: 31

2017

: 10

2022

Levi Olal -

https://qcat.wocat.net/km/wocat/technologies/view/technologies_2699/

SLM

- CDE Centre for Development and Environment (CDE Centre for Development and Environment) -
- Scaling-up SLM practices by smallholder farmers (IFAD)

- Intercropping and crop rotations in cassava cultivation: a production systems approach Thomas W. Kuyper, Wageningen University, The Netherlands; and Samuel Adjei-Nsiah,:
- Field stability of cassava, maize, soya bean and cowpea intercrops DAPAAH, H K; ASAFU-AGYEI, J N; ENNIN, S A; YAMOA, C. The Journal of Agricultural Science; Cambridge Vol. 140, Iss. 1, (Feb 2003): 73-82.: <https://www.proquest.com/docview/203707559>

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