

# PROMOTING USE OF TRIPLE 'S' METHOD IN NORTHERN UGANDA

## (DEVELOPING AND DISSEMINATING BIOFORTIFIED CROPS (DDBC) PROJECT )

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# Objectives

The activity undertaken to promote the use of the Triple S method at scale and build a cadre of trained extensionists to monitor its adoption




## Background: Sweetpotato in food systems

- Estimated 53% of hhs in N. Ug experience food insecurity during the mths of Apr - Jun (UCA 2010, MAAIF 2011)
  - Early sweetpotato planting, a potential food insecurity remedy, becomes compromised by lack of vines to plant
  - Periodic lucrative food supply market following in the food gap prior to main grain harvests remains unexploited.
  - The poverty and food insecurity cycle continues unabated.
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# Status of access to vines at onset of rains: Why irrigated root beds

- Long dry season desiccates planting material
- Pronounced lack of planting material at onset of rains
- Farmers fail to plant, neither afford to buy nor even get vines to buy, others plant less than expected
- More difficult to maintain a growing crop in the swamp during dry season
- Sprouts from previous fields can only be ready to plant two months after the rains start
- Thus, establishing minimally irrigated root beds prior to beginning of rains generate vines for early planting

# Promotion of the Triple S Approach

- ❖ CBO cadres including field staff t World vision, local Government and interested schools like Aboke were trained
  - ❖ Farmer groups identified, sensitised and trained
  - ❖ On farm demos established in each of the 4 districts using different vars to validate the application of Triple S method
  - ❖ Previous farmers' fields also identified for comparison
  - ❖ Participatory review of Triple S leaflet and dev. of 3S calendar
  - ❖ Data on 30-cm long vines collected at 60 and 90 DAP
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# Positive selection of seed roots



# Storage in sand for sprouting



# Sprouted ready for planting in root beds





# Root beds established and watering around plants



## Number of cadres and farmers trained in 2014

|          | <b>Number of cadres and farmers</b> |        |                    |
|----------|-------------------------------------|--------|--------------------|
| District | CBO cadres                          | Groups | Total # of farmers |
| Gulu     | 4                                   | 6      | 121                |
| Oyam     | 2                                   | 2      | 36                 |
| Kole     | 3                                   | 3      | 72                 |
| Lira     | 1                                   | 1      | 18                 |
| Total    | 10                                  | 11     | 247                |

# Happy with Kabode performance



## Average number of 30-cm long vines produced per Triple S root in 2014

|          | <b>Number of 30-cm long cuttings per root</b> |       |       |       |
|----------|---|-------|-------|-------|
| Variety  | Av. # shoots                                  | Lot 1 | Lot 2 | Total |
| Ejumula  | 8   | 35    | 47    | 82    |
| Kabode   | 4   | 20    | 27    | 47    |
| Kakamega | 4   | 43    | 19    | 62    |

# Ejumula shoots



# Sweetpotato vine stump concept: Second lot of vines

**Ejumula variety**



**Kabode variety**

## # of cuttings harvested from 100 roots of Ejumula, Kabode and Kakamega varieties


| Variety  | # of cuttings |        | # of heaps and area planted in acres |        |             |
|----------|---------------|--------|--------------------------------------|--------|-------------|
|          | 60 DAP        | 90 DAP | 60 DAP                               | 90 DAP | Total acres |
| Ejumula  | 3500          | 4700   | 1167                                 | 1567   | 0.68        |
| Kabode   | 2000          | 2700   | 667                                  | 900    | 0.39        |
| Kakamega | 4300          | 1900   | 1433                                 | 633    | 0.51        |

# Sweetpotato sequence planting





# Emerging issues

- Need plan for seed root production – we aim at small roots so plant spacing may be narrowed
  - Use roots coming from clean (tissue culture material)
  - Root storage protocol to observe root curing, age at harvest and sand should not be very fine
  - Triple S calendar developed
  - Technology to be scaled out in other DDBC project implementing areas including Kamwenge and Isingiro districts
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# Draft Triple S calendar 2 key events



Photo courtesy of Sam Namanda (CIP)

Participatory review of the Sweetpotato seed root Storage in Sand and Sprouting protocol

| ~ January 2015 ~  |     |     |     |     |     |     |
|---|-----|-----|-----|-----|-----|-----|
| Sun   | Mon | Tue | Wed | Thu | Fri | Sat |
| Protocol reviews and establishment of irrigated root beds |     |     |     | 1   | 2   | 3   |
| 4   | 5   | 6   | 7   | 8   | 9   | 10  |
| 11  | 12  | 13  | 14  | 15  | 16  | 17  |
| 18  | 19  | 20  | 21  | 22  | 23  | 24  |
| 25  | 26  | 27  | 28  | 29  | 30  | 31  |



Selecting and storing clean roots in sand in a basin for sprouting



Photos courtesy of Stephen Odongo (World Vision)

| ~ December 2015 ~ |     |     |     |     |  |     |
|-------------------|-----|-----|-----|-----|--|-----|
| Sun               | Mon | Tue | Wed | Thu | Fri  | Sat |
|                   |     | 1   | 2   | 3   | 4  | 5   |
| 6                 | 7   | 8   | 9   | 10  | 11   | 12  |
| 13                | 14  | 15  | 16  | 17  | 18   | 19  |
| 20                | 21  | 22  | 23  | 24  | 25   | 26  |
| 27                | 28  | 29  | 30  | 31  | Notes: main harvesting, selecting and storing seed roots under sand medium |     |

Thank  
you for  
listening

