

**Sustainable  
sweetpotato pre-basic  
seed production Y3  
Progress review: June  
– November 2016**



**Njoku Jude, NRCRI, Umudike, Nigeria  
Sweetpotato Seed Systems Community of  
Practice: Sixth Consultation- Sustainable  
Pre-basic Seed Production – Progress  
Review. Nairobi 6-7<sup>th</sup> December 2016**

# Production: capacities?

Country: Nigeria

Period: JUNE – NOVEMBER, 2016

Facilities	No. units	Irrigation (Y/N)	Total m <sup>2</sup>	Method (poly, pot, bench/trough, open)	RMT/ Conventional	Total no. of plants	Multiplication Rate
Screen house	2	Yes/rain fed	1000	Pot		2000	5
Mobile net tunnels	18	Yes/rain fed	97.2	Open		4860	9
Open field multiplication	1	N	560	open		4667	15
Basic seed multipliers	-	-	-	-		-	-

# Production: targets vs actuals?



Country: Nigeria

Total for all varieties: 2 but 1 is promoted

Period: **June 2016 – November 2016**

TC activities	Unit (& size)	Planned No. (June 16 – May 17)	Achieved (June – Nov 16)	% achievement
TC initiation	Plantlets	1000	200	
TC micro-propagation	Plantlets	5000	0	
Hardening	Plants	5000	0	
Screen house multiplication	Cuttings	100000	10000	10
Mobile net tunnel multiplication	Cuttings	108000	97200	90
Open field multiplication	Cuttings	750000	70000	9.3

# Comments on production targets



- Actions taken to increase multiplication rates:
  - E.g. Training of vines to accelerate growth increases ratio to 12-15
  - Application of agrolizer to boost growth of vines
- Actions to reduce costs of production:
  - E.g. Replacement of vermiculite with sterilized saw dust and sea sand (2:1) as medium for hardening plantlets
- Key challenges:
  - E.g. Lack of functional screen house screen house
  - Poor power source to support micro-propagation at TC
  - Limited released varieties to meet farmers preferences
- Lessons to share:
  - E.g. Demonstrations on yield advantage of quality vine cuttings will enhance willingness to buy planting material



- No. of varieties under multiplication: 1
- No. of plants virus indexed (grafted on / *Setosa* and tested with NCM-ELISA): 10 leaf samples were tested with NCM-Elisa
  - No. found negative (10 and 100 %) to 10 virus strains
- % tested within last 6 months and results
  - Variety:UMUSPO3...result: -ve to MMV,SPCSV, SPFMV, SPLV etc....
  - Variety:.....result:.....
  - Variety:.....result:.....
- Seed standards and inspection protocol
  - Current status: Protocol for QDPM developed and pre-tested

# PBS production requirement



**Estimated demand for pre-basic cuttings for next season: 75000 (t dates of season):February, 2016**

**No. of PBS cuttings required: 15000.....**

**Proposed prices for each class or seed:**

<b>Price</b>	<b>Pre-basic</b>	<b>Basic</b>	<b>QDS</b>	<b>Other</b>	<b>Farmer-to-Farmer</b>
<b>Local (NGN) currency</b>	<b>N4.78/vine</b>	<b>N3.8/vine</b>	<b>N2.4/vine</b>		<b>N2.0/vine</b>
<b>US\$ (\$1:N314)</b>	<b>\$0.016</b>	<b>\$0.012</b>	<b>\$0.008</b>		<b>\$0.006</b>

For each class – give length of cutting

Pre-basic:15-20cm

Basic:21-30cm

QDS:21-30cm

Other

# Stakeholder meetings



- Date of last stakeholder meeting: 16<sup>th</sup> Nov 2016
- Number and type of stakeholders
  - Number: 14 participants
  - Type: NGO (3), farmers Society (8), University (1), ADP (1) NASC (1)
- Main agenda items
  - Review of workshop objectives..
  - Overview of SASHA project...
  - OFSP seed certification
  - Participants remarks/buy-in...
- Action and follow up points:
  - Kolpin to mobilize their farmers to procure to work out modalities to basic seeds.
  - Farmer association selected DVMs for QDPM and root producers....
- **Contact made with National Seed Traders Association: No**
  - Potential collaboration on SP seed production
  - Links with registered seed enterprises

# Business plan: implementation June – November 2016



	Political	Technical	Administrative	Socio-cultural
<b>Actions implemented</b>	<ol style="list-style-type: none"> <li>1. Held meeting with senior management on viability of business plan to sustain production of pre-basic seed...</li> <li>2. ...</li> <li>3. ...</li> </ol>	<ol style="list-style-type: none"> <li><b>1. Cost structure &amp; data...</b> Finalized cost structure for TC plantlets and pre-basic seeds</li> <li><b>2. Monitoring production:...</b> Monitored 2000 pre-basic seed production in two Locations</li> <li><b>3. Improve multiplication:</b> Training of vines in scree house</li> </ol>	<ol style="list-style-type: none"> <li>1. Established a management committee and work out operational procedures of revolving fund...</li> <li>2. Initiated opening of sub-account on the existing Institute consult account...</li> <li>3. Quarterly meeting initiated...</li> </ol>	<ol style="list-style-type: none"> <li>1. ...</li> <li>2. ...</li> <li>3. ...</li> </ol>



# Revolving fund: status



1. Composition and operation of revolving fund agreed and documented? **Yes**
2. How often has RF management committee met over reporting period? 2 times
3. Revenue received from sale of cuttings for period June to November 2016 (or by month – see table) No sales
4. Status of budget for pre-basic seed production for 2016/2017: Budget has not been drawn
  - a. Give total budget for PBS production<sup>a</sup>: and then the amount to be requested from RF
  - b. Submitted to RF or senior management: give date
  - c. Approved: give actual or projected date.
5. Percentage of total production cost which will be met by revolving fund: **=%**

<sup>a</sup>. NB this budget is for recurrent costs for pre-basic seed production (i.e. not the total project budget)

# Training – in-country (June – Nov. 2016)



Date	Topic	No. participants (M/F)	Training materials available	Comments
24/11/2016	Triple 's' technology for quality vine conservation and production	62 participant (12 females and 50 males)	1. Medium sized roots 2. Three containers (Paper box, plastic bowl and sack (30kg) 3. Dry sand 4. Used newspaper	The farmers were advised to set up the triple's' following the procedures in their respective homes The training took place in Osun state
21 <sup>st</sup> Novem ber – 2 <sup>nd</sup> Secem ber	Everything you ever wanted to know about sweetpotato	2 participants (Only males)	Training manuals and demonstration materials	The two participants are presently supervising SASHA project activities in Kano and OSUN state

# Jan – May 2017: key areas for strengthening



- Technical:

Training of technical staff on management of pre-basic and basic seed production ....

- Institutional:

Strengthen the breeding program of the institute for release of OFSP varieties of farmer preference

Infrastructure development such as construction of more screen house march with target....

- Financial:

– .....

# 2 BEST PHOTOS

- Select 2 photos which really show something new or different about your pre-basic seed activities. Provide the following information:



- Activity: Visit to screen house by stakeholders
- Location and date: NRCRI, 16<sup>th</sup> November, 2016
- Name of person in photo: Dr Njoku showing advantage or training vine cuttings to enhance pre-basic multiplication ratio
- Photo credit: Dr. Marcel Ogbonna