

**Country Experience: Business plan for  
sweetpotato Pre-basic seed (PBS) in Nigeria**

*Njoku, J.C , Okoye, A.C and Anyaegbunam,  
H.N.*

*Sweetpotato Programme  
NRCRI, Umudike*



**Sweetpotato** Action for  
Security and **Health** in **Africa**

# Introduction



- Nigeria is the second highest producer of sweet potato (*Ipomoea batatas*) in Africa with annual output of 3.4 million metric tons and third largest producer in the world after China and Uganda
- Most of the product is used for table consumption with little for industrial and animal feed
- It is the only crop among the root and tuber crops that has a positive per capita annual rate of increase in production
- The demand for orange fleshed sweet potato (OFSP) which is high in vitamin A in Nigeria is on the increase

- NRCRI has released two varieties of OFSP; UMUOSP 1 and UMUOSP 111.
- Presently NRCRI is involved in maintenance of SP lines, variety development, and multiplication of sweetpotato planting materials
- Pre basic seed production in the net tunnel and screen house will ensure continuous availability of virus free vine to private farmers and institutions
- This will guaranty seed business that will run at sustainable basis through the development of business model

# DESCRIPTION OF THE BUSINESS



- The effectiveness of the seed system will depend on its ability to provide farmers with sufficient quantities of disease free planting materials
- Sweetpotato pre basic seed production maintains pure disease free seed through cleaning, multiplication and dissemination of seeds
- The Institute has tissue culture lab, net tunnels and screen house
- three technical staff (in Umuduke, Iresi and Kano)
- one field staff (Umudike)
- One lab. Technician and
- a desk officer (in Umudike)

# What have we done so far?



## Pre-basic seed production:

- In July, 2016, CIP signed sub-grant agreement with NRCRI, Umudike for Implementation of SASHA project.
- 2 OFSP varieties released at Umudike cleaned up at CIP facilities Ghana.
- Multiplication commenced at the TC lab of NRCRI from the 12 cleaned cuttings
- 418 plantlets weaned and taken to net tunnels as nuclei material for pre-basic seed production
- Presently there are 2000 pre-basic seed established in screen house at Umudike and Iresi substations and considerable number (4860) in net tunnels

## Status of business plan and revolving fund



- The need to develop business plan and revolving fund is aimed at testing the feasibility or viability of seed business to run on full cost recover basis
- This will be achieved with the establishment of revolving fund
- The CIP built staff capacity (PI and Agric Economist) to develop the business plan and Institutionalize the revolving fund
- Attending meeting where presentations were made
- Further training (Ghana) where cost structures in the production process, starting from the TC lab, net tunnels and screen house were outlined and costed
- This was followed by further training (Nigeria) on keeping log sheets and data collection at different levels to establish cost of pre-basic seed production at different stage

# RESULTS OF BUSINESS PLAN



- The Net Present Value (NPV) is a measure of feasibility of an investment. It is a standard measure for estimating the time value of money to appraise long term investments.
- It measures how much value a business investment adds to the capital invested in it. As a rule of thumb a project is accepted if the NPV is non-negative.
- Therefore, the NPV of the seed business at 24% discounting rate was found to be **N153074.9 (489.95USD)** which in addition to BCR of **1.21:1.00(>1)** show the feasibility/viability of the seed business

# Other achievements



- Institution acceptance of the innovation
- Formation of Revolving fund committee
- Worked modalities and opening of sub account in the existing institute revenue account (Umudike consult)
- Organized stakeholders meeting that fueled demand for vines



# Challenges



- Federal government policy of treasury single Account (TSA)- yet to be resolved
- Low capacity of TC lab to produce plantlets for pre-basic seed production
- Late establishment of screen house to expand the production of pre-basic seeds
- Limited number of released OFSP variety that meet the farmers preference

# Way forward



- The business plan will be further fine tuned
- Synchronize the pre-basic seed production with vine multiplication calendar
- Sensitization and promotion Programme.
- Intensified Stakeholders Meetings
- Increased Efforts to release more OFSP varieties to meet farmers demand
- Strengthen TC Lab for production of plantlets or explore other options
- Intensify efforts to facilitate seed standard protocol

# Thank you