

# ORANGE – FLESHED SWEET POTATO PRODUCT DEVELOPMENT IN MALAWI

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# Introduction

- Malawi is one of the largest sweet potato producers in Southern Africa.
- The majority of sweet potato produced are sold in rural informal markets.
- Very limited value addition is done at both household and industrial level
- Very little scaling up of commercial production has been done at industrial level despite the nutritional advantages.
- It is for this reason that UIL has stepped up to formally buy OFSP and process them into nutritional products.

# Project objectives/Targets

- To provide a ready market to OFSP farmers that will lead to increased productivity.
- To produce ready to eat and ready to cook instant nutritious foods
- Increased incomes for farmers
- Greater accessibility of VitA-rich foods to both rural farmers & urban populations
- Improved access of disease-free OFSP vines to farmers through screen house construction
- Target market – commercial market stream and institutional/feeding programs.

# Products in development and status

- OFSP Puree as an ingredient – trials have been done with the different OFSP varieties. The major differences are as a result of the dry matter content, amount of fibrous material and moisture content.



# OFSP Soft Cookies

- Trials for substituting wheat flour with OFSP puree have been done successfully. The biscuits tend to be soft and therefore will specifically be called soft cookies and not biscuits. With the use of puree, sugar and fat content in the biscuit is reduced.
  - Nutritional analysis is Under-way.
  - No food color is used
  - Different flavor variants Proposed.
  - To finalize on the die for the shape & size of the cookies



# OFSP Crisps

- The OFSP Crisps trials have been done and product is finalized. Out of the 6 varieties, 4 were found suitable for crisps. Factors affecting crisps quality include:
  - Color
  - Moisture content
  - Maturity
  - Storage time
  - processing





# Products in the pipeline

- OFSP Nutritional Bar
- OFSP Flour Mixes
- OFSP puree baby food
- OFSP porridge flour mixes



# Observations so far

- OFSP puree quality parameters varies with season
- Deep orange varieties not suitable for crisps as they tend to give a burnt color and non attractive
- The different varieties tend to perform differently in different climatic zone & this affects processing
- Flood of NGOs using certified OFSP vines from multipliers directed for UIL due to GoM flood emergency response

# Challenges

- Storage of OFSP roots for a period of time without big losses in beta-carotene – specialized storage/warehousing facility a must.
- Negotiations needed between OFSP producers and UIL to standardize a price so both parties are happy
- Price variations are very high from one season to another
- Different moisture content among OFSP roots harvested in summer vs winter
- Risk of losing roots within hunger period

# Challenges cont.....

- Anticipated high prices which may result in wheat substitution of wheat unviable
- Shelf life study to take a minimum of a full year
- Economic potential/viability of the OFSP products
- As a pvt sector, we have a challenge in promoting the OSFP product based on the nutritional products without the commercial emphasis
- Whether people will be will willing to pay for the added value in the OFSP nutritional processed products

# Conclusion

- There is growing interest in OFSP and its products among the people
- There is potential in OFSP products at industry and commercial level
- There is need for technical support in further product devt & establishing storage facilities for OFSP roots considering the seasonality of the OFSP
- There is need for support to the private sector in marketing of OFSP product considering the nutritional value
- There is need for concerted effort from all stakeholders (pvt sector, govt, NGOs, research institutions and farmers)



**THANK YOU**