



USAID
FROM THE AMERICAN PEOPLE



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Country: Nairobi, Kenya

Country Project: Horticulture

Stawi Foods & Fruit Company

Venue: Food Processing Facility

Audience: Processing Employees and CEO

Number of people : 5

Dates: 29 August 2016 thru 11 Sept 2016



Assignment Title:

DEVELOPMENT OF NEW NUTRITIOUS PRODUCTS FOR STAWI FOODS & FRUIT COMPANY

1. Assignment Objectives as in SOW

Conduct Training
of Quality & Food
Safety Production

Review Processing
Procedures and
Provide
Recommendations

Review Potential
for New Product
Production

Conduct Training
on Product
Development
Process

Develop a New
Nutritious Product

2. Achievement of the assignment objectives

Conduct Training of Quality & Food Safety Production

- Provided Good Manufacturing Practices (GMP) Refresher for Processing Employees
- Provided HACCP training for Employees
- Created Signage for GMPs to be posted around the facility

Review Processing Procedures and Provide Recommendations

- Conducted an evaluation of current processing method of porridge
- Provided documentation to help in batching of the current products
- Reported on efficiencies that will require investments as well as safety for employees

2. Achievement of the assignment objectives

Review Potential for New Product Production

- Current facilities are not suitable for ready to eat (RTE) products
- Provided recommendations for potential suitable facilities for production

Conduct Training on Product Development Process

- Conducted training of both the owner and an employee on product development process and formulation work
- Trained 1 employee on the formulation process and noting changes and observations

Develop a New Nutritious Product

- Worked in a residential kitchen to develop a RTE breakfast cookie using Whole wheat & 2 types of sorghum
- Developed a Sensory Evaluation form for current products and new breakfast biscuit products
- Produced enough samples to conduct a sensory evaluation with consumers at Baby Banda Pregnancy & Baby Expo

Benchtop Product Development



Benchtop Product Development



Baby Banda Pregnancy & Baby Expo

- Concept Testing of the biscuits with consumers was done at the Baby Banda Pregnancy & Baby Expo
- Consumers sampled the 2 varieties and provided feedback on the samples

Baby Banda Pregnancy & Baby Expo



Baby Banda Pregnancy & Baby Expo



Baby Banda Pregnancy & Baby Expo



3. Recommendations to the host with regards to the assignment

- **Make Quality & Safety a Priority**
 - Designate a person as Safety Lead
 - Ensure posted Quality/Safety signage is visible and undamaged
 - Ensure proper PPE is available to the employees
 - Ensure employees are using proper PPE in the spaces necessary and following rules
 - Incentives maybe necessary to get employees to begin getting used to this process
 - Generate a GMP/HACCP Process and Plan
 - Ensure foodstuff is handled in the most sanitary way possible
 - Cooked grains should not be put back into the same sacks as the raw grains (source of cross-contamination)
 - Cooked grains should not be place on the ground
 - Proper cleaning schedule needs to be in place, at minimum on a weekly basis

3. Recommendations to the host with regards to the assignment

- **Begin an exit plan from the current facility**
 - Concerns for quality & safety of the product and employees
 - RTE products cannot be produced in current facility; rental of a bakery or co-manufacturing is necessary
 - Larger processing facility will increase efficiencies
- **With growth, increased efficiencies will be necessary**
 - Equipment purchases suggested in report will help

3. Recommendations to the host with regards to the assignment

- **Learn Your Customer Base**
 - Define your customer base and what particular they like the most about the product
 - Offer product tasting at local grocery stores
 - Record (scientifically) the data about your consumers
- **New Product Development Recommendations**
 - Continue to work on these formulations
 - Determine the target audience
 - Use sensory information to continue with the formulation work
 - Convert all household measurements to percentages to allow for easier scale-up of formulas.

4. Anticipated Impact

- Increased Quality & Safety of the product and the employees
- Efficiencies in the production of current products
- Understanding current market base and identifying opportunities for further growth
- Be able to conduct product development independently
- Understand the importance on sensory data in product development

5. Recommended future volunteer Assistance

Follow-up with processing plant conditions

Continue to provide refresher HACCP & GMP training to employees

Continue to identify gaps in efficiencies

Shelf Life & Packaging Training for all potential products

Business Plan & Product Portfolio Definition

Help identify funding sources for increasing capacity

6. Recommendations to other non-host stakeholders

- Projects that potentially focus on aiding the government in regulation of the food industry
- Provide larger trainings that may benefit multiple small holder processors
 - Equipment
 - Quality & Safety
 - Product Development

7. How can CRS improve future volunteer experience

Overall an amazing experience!

- The hotel was great, central to shopping and food. Very safe for walking around and exploring, relatively close to many tourist destinations
- Provide more information of economics of the area.
 - Wealth distribution; Levels of income- determines the market for certain products
- Related to projects; information on current food regulation policies would be helpful as prior knowledge reading

Thank You!

Action plan for host recommendations

Recommendation	Specific Action	Responsible person	By when
1. Assign an individual to be the safety/ quality Ambassador	Person will be in charge of GMP signage, PPE for employees and be the enforcer of regulations	Eric	
2. Properly document process runs, batching, and COC (chain of custody)	Use spreadsheet provided for batching and formulation, make additional forms for processing	Eric	
3. Establish a proper cleaning and sanitation schedule	Schedule a minimum of a once a week cleaning and sanitization schedule.	Eric	
4. Continue product development work on Ready to Eat breakfast snacks	Identify a fully functional bakery or kitchen to utilize for product development work, as well as for potential scale-up	Eric	
5.			
6.			