REPORT ON TRAINING OF TRAINERS ON HANDLING POSTHARVEST LOSSES OF WATERMELONS, MANGOES AND PINEAPPLES HELD ON 27TH & 28<sup>TH</sup> JANUARY, 2020 AT MOFA REGIONAL CONFERENCE ROOM- TAMALE, GHANA.



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## Contents

1.0 Executive Summary	3
1.1 Welcome Address – RDA AND RELC Coordinator	4
1.2 Training Facilitators	4
1.3 Training Organizers	4
1.4 Objective.	6
1.5 Specific Objectives	6
1.6 Target Audience	7
2.1 Scope of Lectures	7
2.2 Training expectations	7
3.0 Activities of Day One	7
3.1 Outline of Presentation on Processing of fruit Juice	11
3.2 Outline of Presentation on Food safety	11
3.3 Outline of Presentation on Food Packaging	12
3.4 Business Development of fruit juices.	12
3.5 Activities of Day Two	12
3.6 Workshop Evaluation	18
3.7 Conclusion	18
Appendix A: List of participants	19

## List of Figures

Figure 1: Organizers of the program giving a brief statement	6
Figure 2: Delivering of lectures by CSIR-FRI MAG Focal person	8
Figure 3: Delivering of lectures by Papa Toah	9
Figure 4: Delivering of lectures by Thomas Najah	10
Figure 5: A section of participants	11
Figure 6: Participants sorting fruits	13
Figure 7: Participants washing fruits	14
Figure 8: Participants peeling watermelon fruits	15
Figure 9: Participants cutting watermelons	16
Figure 10: Participants cutting mangoes	17
Figure 11: Participants filling bottles with extracted juices	18

### 1.0 Executive Summary

The Modernizing Agriculture in Ghana (MAG) Project is geared towards impact measurement and capacity building across the districts and regions of Ghana. As part of the project, a workshop was organized by the Northern region RELC in collaboration with the Council for Scientific and Industrial Research (CSIR)-Food Research Institute on training of trainers on reducing postharvest losses of some selected fruits (watermelon, pineapple and mangoes). This was held at Ministry of Food and Agriculture conference room at Tamale in the Northern Region from the 29<sup>th</sup> to 30<sup>th</sup> January, 2020. A total of sixty (60) participants comprising mainly RAD- extension, MAO-Ext ension, DAO crops, DAO-WIAD, WIAD officers were involved. Forty-five (45) participants were males and fifteen (15) were females.

The welcome address was given by Mr. Declerq Mensah, Regional Director of Agriculture RDA, Northern region, who re-enforced the commitment of District of Food and Agriculture (DOFA) and Council for Scientific and Industrial Research (CSIR) in improving productivity and income through the adoption of appropriate post-harvest technologies within the agriculture sector. He explained the need for field officers to be equipped with the requisite knowledge and skills to effectively train farmers in the agriculture sector across the districts and regions of Ghana.

The overall objective of the workshop was to train field officers on how to properly handle post-harvest losses of the mentioned fruits. Specifically, key concepts of postharvest management of fruits were defined, techniques involved in fruit juice processing were established and participants were equipped to transfer acquired skills and knowledge to farmers. The topics covered were: Basics of food processing, Importance of Food Preservation, Processing of fruit juice, Food safety and Food packaging. Hands-on training and practical sessions were adapted to involve all participants of the workshop.

The expectations of the participants and facilitators of the workshop include the following; understand basic principles of food processing, importance of food preservation, be equipped with techniques and principles of processing of fruit juices, understand and apply the basic principles of food safety and be equipped with techniques of food packaging.

Dr. Charlotte Oduro-Yeboah, the CSIR-FRI MAG focal person took the participants through the basics of food processing. Lectures on food preservation, food safety and packaging were delivered by Mr. Papa Toah Akonor shortly after the first presentation. A presentation on Business development of fruit juices was done by Thomas Najah. The second day's activity was chiefly centred on practical demonstration on fruit juice processing. Participants were given the opportunity to ask questions on all topics discussed and also to evaluate the whole training programme. These questions and concerns were duly addressed by facilitators and organizers respectively.

# 1.1 Welcome Address – Regional Director of RDA and Northern Regional RELC Coordinator

Mr. Declerq Mensah and Dr. Mutari Abubakari begun the day's activities by re-enforcing the commitment of Ministry of Food and Agriculture (MOFA) and Council for Scientific and Industrial Research (CSIR) in improving productivity and income through the adoption of new innovations within the agriculture sector. They added that the workshop is expected to ensure that field officers were equipped with the requisite knowledge and skills to make a great impact to farmers within the districts.

#### 1.2 Training Facilitators

Shortly after the welcome address there was an introduction of organizers and participants of the programme. The facilitators for the training programme were as follows:

- 1. Dr. Charlotte Oduro-Yeboah, MAG Focal Person, CSIR-Food Research Institute
- 2. Mr. Papa Toah Akonor, Senior Researcher, CSIR-Food Research Institute
- 3. Mr. Thomas Najah, Marketing Officer, CSIR-Food Research Institute

## 1.3 Training Organizers

The organizers of the training programme included the following persons:

1. Dr. Mutari Abubakari, CSIR- Savanna Agricultural Research Institute, RELC Coordinator for Northern Region.

2. Mr. Declerq Mensah, RAO-Extension Department, Deputy RELC Coordinator for Northern Region





Figure 1: Organizers of the program giving a brief statement.

## 1.4 Objective

The overall objective of the training programme was to train field officers on how to properly handle postharvest losses of some selected fruits in season by adding value

## 1.5 Specific Objectives

- Define the key concepts of postharvest management of fruits
- Understand the techniques involved in fruit juice processing
- To equip field officers to transfer acquired skills and knowledge to farmers

## 1.6 Target Audience

A total of sixty (60) participants comprising mainly RAD- extension, MAO-Ext ension, DAO crops, DAO-WIAD, WIAD officers were involved. Forty-five (45) participants were males and fifteen (15) were females. They all came from the various districts in the Northern region.

#### 2.0 Scope of Lectures

The topics covered included the following: Basics of food processing, Importance of Food Preservation, Processing of fruit juice, Food safety and Food Packaging. Questions and answers followed immediately after the presentations.

### 2.1 Training Expectations

The following were the expectations to be met at the end of the training:

- Understand the basic principles of food processing
- Understand the importance of food preservation
- Be equipped with techniques and principles of processing of fruit juices
- Understand the basic principles of food safety
- Be equipped with techniques of food packaging

#### 3.0 Activities of Day One

The training begun with the registration followed by the introduction of organizers and participants. A brief statement were delivered by the RELC and deputy RELC Coordinator of Northern region.

A brief presentation was done by Dr. Charlotte Oduro-Yeboah on the Basics of Food Processing followed by a lecture on the Importance of Food Preservation, Processing of fruit juice, Food safety and Food Packaging by Mr. Papa Toah Akonor.



Figure 2: Delivering of lectures by CSIR-FRI MAG Focal person



Figure 3: Delivering of lectures by Papa Toah



Figure 4: Delivering of lectures by Thomas Najah



Figure 5: A section of participants

## 3.1 Outline of Presentations on Processing of Fruit Juice

- Introduction
- Value addition to fruits
- Stages in processing fruit juice
- Quality Measures (Good manufacturing Practices)

## **3.2 Outline of Presentations on Food Safety**

Food Safety and Hygiene

- Food Contamination
- Types of Hazards
- Prevention of contamination

## 3.3 Outline of Presentations on Food Packaging

- Introduction
- Categories of Packaging
- Choosing a packaging material
- Labelling

## 3.4 Business development of fruit juices

- Book keeping
- Importance of book keeping
- Marketing mix
- Product life cycle
- Stages of product life cycle

## 3.5 Activities of Day Two

A recap of Day1 activities was facilitated by Dr. Charlotte Oduro-Yeboah followed by the practical demonstration on processing of pineapples, mangoes and watermelons by the CSIR-Food Research Institute team.



Figure 6: Participants sorting fruits



Figure 7: Participants washing fruits



Figure 8: Participants peeling watermelon fruits



Figure 9: Participants cutting watermelons



Figure 10: Participants cutting mangoes



Figure 11: Participants filling bottles with extracted juices

## 3.6 Workshop Evaluation

The participants were given the opportunity to evaluate the various sessions of the workshop to enable the facilitators and organizers assess the success of the workshop.

### 3.7 Conclusion

The participants were empowered to define the key concepts involved in the postharvest management of fruits. They were equipped in understanding the techniques involved in the processing of fruit juices. The participants were encouraged to transfer the skills and knowledge gained to the farmers.

## **Appendix A: List of Participants**

### **REGIONAL AGRICULTURAL DEPARTMENT**

### **NORTHERN REGION**

# BI-MONTHLY TECHNICAL REVIEW OF MEETING ON FRUIT PROCESSING (WATER MELON AND MANGO) AT VRA CLUB HOUSE, TAMALE

27<sup>TH</sup> - 28<sup>TH</sup> JANUARY 2020

NO.	Name Of Participant	Gender	Location	Designation
1.	Abukari Neinolow Daniel	M	Mion	DAO-EXTENSION
2.	Abubakari Dawuda	М	Kpandai	WIAD
3.	Abukan Yakubu	M	Tamale	RAO LIVESTOCK
4.	Abdulah Hawabu	F	Kumbungu	DAO-EXTENSION
5.	Fausia Ayale	M	East Mamprusi	MAO-EXTENSION
6.	Cynthia K. Nagali	F	Kumbungu	WIAD
7.	Badmus Mutiu	M	East Mamprusi	MAO WIAD
8.	Alhassan Ibrahim	М	Chereponi	DAO-EXTENSION
9.	Alhassan Musah Suleman	М	Chereponi	WIAD
10.	Alhassan Abdulai	M	Tamale	EXTENSION
11.	Waabuzie George	М	Yunyoo	EXTENSION

12.	Prince Dennis	М	Wwunsi	EXTENSION
	Nankezor			
13.	Prosper Mensah	М	Yenchi	MAO EXTENSION
14.	Baba-Ali Seidu	М	Nanton	EXTENSION
15.	Abdulai Issahalhu	М	Yunyoo	WIAD
16.	Ibrahim Mariam	F	Karaga	WIAD

17.	Akua Adoma Adjei	F	Rad	MAO-EXTENSION
18.	Ramatu Issah	F	Saboba	WIAD
19.	Victor Sogloh	M	Nanumba North	WIAD
20.	Bridget Parwar	F	Tamale	WIAD
21.	Sumaila Gafaru	M	Bunkpungu	DAO-EXTENSION
22.	Baba Musah	M		ZONAL MANAGER
23.	Papa Toah	M		
24.	Fauzia Sadick	F	Savelugu	MAO-WIAD
25.	Sylvester Dc Musah	M	Rad Tamale	RAO-EXTENSION
26.	Felix Oteng Duah	М	Sanelugu	MAO-EXTENSION
27.	Dakuda	М	Seign	RAE
28.	Adam Fuseini	M	Zabzugu	DAO-EXTENSION
29.	Rashida M. Mustapha	F	Tolon	WIAD
30.	Mohammed Hussein	М	Mion	WIAD

31.	Malik Ramatu	F	Nanton	WIAD
32.	Bawa Alhassan	M	Bunkpurugu	WIAD
33.	Sulemana Nuhu	M	Kpandai	DAO-EXTENSION
34.	Alhassan Abdul Mujeeb	M	Saboba	DAO-EXTENSION
35.	Abdulai Abidatu	F	Yendi	WIAD
36.	Emmanuel Damanka	M	Gushegu	MAO-WIAD
37.	Sabi Tabasum	M	Tatale	WIAD
38.	Zakaus A. Alhassan	M	Tamale	ENG.
39.	Francis Kpapo	М	Tatale-Sanful	DAO-EXTENSION
40.	Sumani Dawuda	М	Tamale	DRIVER
41.	Alhassan Adamu	F	Wulensi	WIAD
42.	Abdul Somed	М	Tamale	RAD-EXTENSION
	Abdulfailu			
43.	Hauza Mohammed	М	Bimbilla	MAO-EXTENSION
44.	Abubakari Mutari	М	Nyankpala	RELC
				COORDINATOR
45.	Karimu Musah	М	Town	DAO-CROPS
46.	Tamimu Hamza	М	Moagdari	DAO-EXTENSION
47.	Iddrisu Imuw	М	Sagnerigu	DAO-EXTENSION
48.	Mesira Rubabatu	F	Yagaba	DAO-WIAD
49.	Issifu Abu	M	Sagnerigu	MAO-EXTENSION
50.	Mohammed Yushawu	М	Tamale	RAD- EXTENSION

51.	Dr. Charlotte Oduro-	F	Accra	MAG FOCAL
	Yeboah			PERSON CSIR-FRI
52.	Thomas Najah	M	Accra	MARKETING
				OFFICER CSIR-FRI
53.	Gariba Alimiyao	M	Accra	DRIVER CSIR-FRI
54.	Mohammed Muniru	M	Karaga	DA0-EXTENSION
55.	Akugre Vida Abugawiu	F	Tamale	RAD-EXTENSION
56.	Issifu Salifu	M	Zabzugu	DAO-WIAD
57.	Amiyuure A. Joshua	M	Gushergu	MAO-EXTENSION
58.	Joan Mawu	F	West Mamprusi	WIAD
59.	Akatuk Pius Adaawa	M	Tamale	RAD-EXTENSION
60.	John Paul Klutsey	М	West Mamprusi	MAO-EXTENSION