

**REPORT ON TRAINING OF TRAINERS ON HANDLING
POSTHARVEST LOSSES OF SELECTED FRUITS IN SEASON
(WATERMELONS, ORANGES AND PINEAPPLES) HELD ON
18TH & 19TH NOVEMBER AT GLORIAKA HOTEL- WINNEBA,**



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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 Central 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 oranges) in season. The workshop was done to empower local institutions through capacity building with the adoption of new technologies within the agriculture sector on handling postharvest losses of some fruits in Ghana. This was held at Gloriaka Hotel at Winneba in the Central Region on the 18th to 19th November, 2019. A total of forty- eight (48) participants comprising mainly extension officers and few processors. Twenty-three (23) participants were males and twenty-five (25) were females.

The welcome address was given by Mr. Hope Kumah, District Director of DOFA, Winneba, 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 some selected fruits in season. 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. 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. The workshop was officially brought to an end with a closing remark by the Central Regional Director of MOFA.

1.1 Welcome Address – District Director of DOFA

Mr Hope Kumah 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. He 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 regions and 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. Agatha Amuzu, Chief Technical Officer, CSIR-Food Research Institute

1.3 Training Organizers

The organizers of the training programme included the following persons:

1. Mrs. Esther Marfo-Ahenkora, CSIR-Animal Research Institute, RELC Coordinator for Central Region.
2. Dr. Peter Omega, RAO-Extension Department, Deputy RELC Coordinator for Central 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

Forty-eight (48) participants comprising mainly extension officers and few processors were drawn from Department of Food and Agriculture (DOFA) of the Ministry of Food and Agriculture (MOFA). Twenty-five (25) participants were males and twenty-three (23) were females. Forty-six (46) of the participants were Agriculture extension officers from MOFA and the remaining two (2) were processors. They all came from the various districts in the central 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 – 18th November, 2019

The training begun with the registration followed by the introduction of organizers and participants. A brief statement was delivered by the RELC Coordinator of central region, Mrs. Esther Marfo-Ahenkora

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

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

Activities of Day Two – 19th November, 2019

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





Figure 4: Hands-on demonstrations

3.8 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.

4.0 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.

4.1 Recommendations:

The following recommendations were made by participants on the concluding day of the workshop:

- The economics (business) aspects of the juice processing should be included in the training.
- The hands-on training should be arranged in such a way that every participant will take part in the processing of the various fruits.

4.2 Closing Remarks



Figure 5: Address by Central Regional Director of Extension Services

Mr Samuel Abraham, Central Regional Director of Agricultural Extension Services gave a brief closing remark at end the training programme.

Appendix: List of Participants

No	Name	Gender	Position	Institution/District
1	Theodore G. Ntem	M	MAO- Extension	DAO, Winneba
2	Margaret Quarm	F	MAO-WIAD	DAO, Elmina
3	William Asante Lopez	M	DAO-Extension	DAO, Assin South
4	George Ofori	M	FxBa Manager	Penpansoe Hold, Cape Coast
5	Eric Yeboah	M	DAO-Extension	DOA, Nsaba
6	Evelyn Hayford	F	ADA-WIAD	DAO, Nsaba
7	Eunice R. Amah	F	Processor	Private/ Cape coast
8	Esther Birago Amanfo	F	DOA-WIAD	DOA/Afransi
9	Rose A. Bontey	F	MAO-WIAD	MAO/Agona Swedru
10	Jackson A. Boateng	M	MAO-Extension	DOA/Swedru
11	Faustina Agyarko	F	DAO-WIAD	KEEA/ Central
12	Joseph K. Hadzin	M	DAO-Extension	DOA/Asikuma
13	Benedicta O. Boateng	F	MAO-Extension	DOFA/Saltpond

14	Jonathan NN. MacCarthy	M	MAO-Extension	DOA/Assin Foso
15	Alfred Nii Ayi Aryeetey	M	DAO-Extension	DOFA
16	George Asiedu Manford	M	DAO-Extension	DOA/Awutu Breku
17	Charles Menka	M	DAO- Extension	DOFA/Assin Breku
18	Amevor Christina	F	DAO/ Extension	DOFA/Gomoa West
19	Akyeamaa A. Osei	F	DAO-WIAD	DOFA/Assin North
20	Gloria Akuffo	F	MAO-WIAD	DOFA/Mfanteman
21	Andrews Obeng Nimoh	M	MAO-Extension	DOFA/Dunkwa
22	Amelia H. Indoms	M	Processor	
23	Eric Yeboah	M	MAO/Extension	DOFA/Awutu Senya East
24	Yahaya Mustapha	M	DAE	DOA/Alti-Mikua
25	Sylvester Gyebi	M	MAO-Extension	DAO/Elmina
26	Ringo Gottah	M	Extension	DOA/Twifo Hemang
27	Mabel Konadu Boahen	M	DAO-WIAD	DOFA/Assin South

28	Nana Ama Rockson	F	MAO-WIAD	DOA/Winneba
29	Edith Awo Fianu	F	DAO-WIAD	DOA/Twifo Praso
30.	Oppong Charles	M	DAO-WIAD	DOA/Diaso
31	Francis Baah	M	DAO-WIAD	DOFA/Ajumako
32	Maxwell Akuffo	M	DAO-Extension	DOA/Ojobi
33	Hope K. Kumah	M	MDA	DOA/Winneba
34	Michael Ayithey	M	DAO-Extension	DOA/Diaso
35	Sussan Addoquaye	F	DAO-WIAD	DOA/Gomoa East
36	Josephine Mensah	F	WIAD	DOFA/Ekumfi
37	Enestina Assa	F	MAO-Crop	DOA/Cape Coast
38	Haison Tettey	M	WIAD	DOA/Twifo Hemang
39	Francis Ansah	M	Extension	DOA/Ekumfi
40	Naomi Kusi Achiaa	F	DAO-Extension	DOA/Ajumako
41	Obiri Awuah	M	DAO-WIAD	DOA/Dunkwa
42	Desmond Etorli Dzisenu	M	MAO-WIAD	DOA/Cape Coast

43	Vivian Turkson	F	MAO-WIAD	DOA/Kasoa
44	Lampety Sandra	F	DAO-WIAD	DOFA/Bereku
45	Obed Obiri Yeboah	M	DAO-Extension	DOFA/Cape Coast
46	Moore Arthur Gifty	F	WIAD	DOFA/Dunkwa Offin
47	Akosua M. Annor Forfee	F	WIAD	DOFA/Apam
48	Sophia Afful	F	Ag.RAO-WIAD	DOFA/Cape Coast