

Title: NIFAAS POST HARVEST MANAGEMENT WORKING GROUP STORY

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Key Issues

- Created a common understanding among members the concept, principles, relevance and challenges of Post-harvest management (PHM) in agri-food systems;
- Enhanced understanding of the goals, objectives and actors of the PHM-WG.
- Strengthened the capacity of members of the Working Group to source information and technologies and analyze and disseminate them to target audience.
- Increased capacity to integrate gender, climate change, youth unemployment, agripreneurship into PHM.
- Enhanced capacity to identify actors and target groups for PHM intervention
- select farmers, groups and experimental sites based on project's objectives and by considering relevant indicators;
- Continuous awareness creation;
- Membership solicited from all agric subsectors; with passion and commitment;
- NIFAAS/AFAAS/GFRAS network to use WG to reach the last mile.

Executive Summary

The NIFAAS Post-Harvest Management Working Group (NIFAAS PHM-WG) was established in 2016 as one of the focal areas of NIFAAS interventions to enhance food and nutrition security in the country. Its main objective was to provide a national platform to support policy improvement, technical guidance, and good practices in post-harvest management in Nigeria. The NIFAAS PHM-WG also offers opportunity for synergy with regional and global level community of practice to enhance PHM. The post-harvest management working group (PHMWG) is made up of professionals who are passionate about postharvest loss (PHL) prevention.

The strategies adopted to intervene in PHL prevention include capacity strengthening of members to enhance skills and knowledge in needs assessment; proffering solutions with technologies and practices; information seeking and sharing on WhatsApp platform, awareness creation and sensitization at individual community and working group levels on bad and good practices in postharvest system in Nigeria. Several activities were carried out within the limit of the available resources to ensure outreach of NIFAAS at individual household and community level in Nigeria.



NIFAAS Post Harvest Management Working Group Workshop (PHMWG) Held At National Agricultural Extension Research And Liaison Services (NAERLS)/Abu Zaria Conference Hall On 25th May, 2018

Introduction

The magnitudes of postharvest losses in the food supply chain vary widely among different crops, areas, and economies. In African countries, significant amount of produce is lost in postharvest operations due to poor awareness, lack of knowledge, inadequate technology and/or poor storage infrastructures. In developed countries, food loss in the middle stages of the supply chain is relatively low due to availability of advanced technologies, efficient crop handling and storage systems and effectiveness of agricultural extension workers in timely and proper dissemination of information and technologies on post-harvest management (FAO, 2014). The Agricultural extension worker has an important role to play in creating awareness as well as improve knowledge and skills of farmers and stakeholders on proper post-harvest handling techniques. The effectiveness of extension service delivery in the post-harvest sector, however, largely depends on the adequate number of extension workers and the technical

expertise and opportunities they have to disseminate post-harvest handling. It also depends on availability of information, education and communication (IEC) materials and the budget allocation for the conduct of extension activities (ANRP, 2009). If post-harvest handling technologies are widely disseminated and adopted, the quality and safety of produce will improve, as well as market competitiveness and subsequent incomes accruing to the farmers. It is in line with this background that NIFAAS keyed into the AFAAS PHMWG to contribute to the reduction of Post-Harvest Losses (PHL) and bad practices along the food chains. This will promote food and nutrition security thereby contributing to the attainment of especially SDGs 2 & 6; zero hunger and improve agriculture and rural productivity respectively.

Activities

1. Trainings and Workshops

1. **Capacity Strengthening and Innovative Learning in Post-Harvest Management**
2. **National Workshop on Enhancing Post-Harvest Handling for Food Security and Awareness Campaign on Unwholesome and Good Practices in Grain Storage- NIFAAS**

1.3 The PHM Awareness Campaign at Samaru Market-AFAAS/NIFAAS

1.4 NIFAAS Post Harvest Management Working Group (PHM-WG) Side Event at NIFAAS AGM, Held at Michael Okpara University of Agriculture, Umudike (MOUUAU)

1.4 Training and Learning in Post-Harvest Management. Business Models for the Promotion of Post-Harvest Management-AFAAS

1.5 Agricultural Extension in Post-harvest Loss (PHL) Reduction in Nigeria-NIFAAS

5. Post-Harvest Management Situation Report from ADPS/NIFAAS

6. Facilitate multi-stakeholder role in stimulating improve postharvest management-AFAAS



Members at a training session



Participants during the workshops

LESSONS LEARNT AND SUGGESTED WAY FORWARD

1. What went well?

4.1.1 Capacity strengthening: NIFAAS PHMWG members cut across different professions and institutions including academia, researchers, extension workers, farmers and marketers. Through the trainings received members acknowledged

that wide range of opportunities opened up in the areas of research, extension service delivery and enhance knowledge to impart in post-harvest management of commodities in Nigeria.

100% members conducted postharvest related studies.

2. Awareness creation /Sensitization:

Individual members (100%) testified to being exposed to several bad/sharp/unwholesome practices within the postharvest system in Nigeria through the campaign to Samaru, Zaria market was a huge success as producers, marketers, processors and consumers were reached and convinced to adopt good practices. Flyers were distributed.

3. Information seeking: Information seeking/searching of members was enhanced in order to meaningfully contribute to discussions on the Whatsapp platform. However, considering the proliferation of information occasioned by breakthroughs in ICTs, knowledge management is of essence to ensure abuse.

1.4 Resilience of NIFAAS PHMWG: The working group has taken a bold step to ensure NIFAAS/AFAAS/GFRAS network presence at the grass root level (last mile). It has proven to be a veritable tool to reach out to the actors in postharvest system of Nigeria if well harnessed.

4.2 What Did Not Go Too Well?

2.1 NIFAAS-PHMWG at Samaru market during sensitization on best PHM practices

Funding: There has been poor funding to back up research and for dissemination of technologies and information to end users.

Funds should be allocated to the extension services department of Research Institutes and ADPs to ensure step down trainings to farmers and other stakeholders.

2.2 Dearth of technologies: Identified technologies like green house, processing and packaging and solar drying and dehydrators are expensive.

Youth working group should partner with PHM group to reach out to youths to identify opportunities for youth and take action.

3. Harmful practices: They are rampant and adversely affect household food, health and nutrition security as well as local and international trades. The urgent need for more awareness and adequate control policy.

4. Drying problems: The One-Stop Centre being proposed by the FMARD for extension delivery should be designed based on cost-sharing principle such that it can be sustained without public budget. Commercial farmers should be targeted first.

5. National Farmers Helpline: Federal Ministry of agriculture should ensure adequate responses to farmers and stakeholders' enquiries. This will ensure they take informed decisions by making the helpline functional.

6. Shortage of Hermetic Storage PICS bags: It was noted that piloted trainings took place in some States and farmers embraced the technology. However, the only known source/manufacturer of the technology is in Kano State, hence it is scarce in Nigeria. AFAAS Coordinator should explore the possibility of scaling up of production to meet demands in Nigeria where there is existing market and business opportunities. To design modalities for production and popularize the PICS storage bag technology in Nigeria.

7. Encourage takers: Need to encourage producers to produce, identify takers along the value chains and introduce the business model to them.

2.8. Stepping down training to farmers/technology dissemination:

Having enjoyed series of trainings on PHM, it was agreed that WG members activities in the action plan will center around farmers' training and awareness creation. The ADP/MANR participants from the states are directly involved in farmers trainings. This is a strong point in this learning activities, the participation of the extension Agents from the States is a guarantee for the learnings to reach farmers and other stakeholders.

2.9. Sustainability of good practices: The one-stop Centre initiative of the Federal government should be made functional to support value chain approach. Staff need to write back-to-office reports for documentation. Same staff should be sent for subsequent trainings where possible to ensure continuity. There should be follow up monitoring and evaluation to guide actions at all levels.

2.10. Emphasis on business model: This was seen as the true way to engage agriculture as way out to contributing to economic development, food security, poverty reduction, wealth creation to entice youth and improve men and women empowerment.

2.11 AFAAS PHMWG: AFAAS should demonstrate effective leadership by ensuring physical formation of PHWG in all the Country Fora in Africa, encourage experience sharing and peer learning and encourage the implementation of country-specific activities and linkage with global initiatives.

2.12 NIFAAS PHWG: NIFAAS PHWG could still go ahead with formulating and implementing actions that could positively impact on PHM system in Nigeria because the PHMWG like other WGs should be tools for NIFAAS to reach the actors in various value chains to obtain evidence, address needs and support advocacy.

Try every means possible to disseminate information and technologies on PHM due

the effect of PHL on the development of agriculture in Nigeria; Encourage capacity building and peer learning with other PHMWG from other parts of the world. Have PHWG virtual platform that is sustainable; and develop activities that are worthwhile which could attract local or international sponsorship. Low use of agro-chemicals and other non-recommended substances to store grains, meat and fish;

Processing using spoilt produce especially yam flour with spoilt or rotten yam tubers; Storage of vegetables; Ignorance of the health and nutrition implications of sharp practices and not adopting best practices

2.14 Proper needs assessment, analysis of the value chains of commodities, adoption of the business model, collaborations among actors at national, regional and global levels to get the good practices/information to be disseminated to stakeholders following the action plan will ensure change in the right direction. Addressing constraints such as poor infrastructures particularly roads and electricity as well as eliminating bad practices with advocacy support of NIFAAS, AFAAS and GFRAS, PHMWG could contribute to food loss reduction in Nigeria.



NIFAAS-PHMWG at Samaru market during sensitization Campaign on best PHM practices

FAO, (2014). Project: Reduction of Post Harvest Losses for Food Security DRK/10/005//01/99 UNDP Atlas ID: 00078554 Project Terminal Rep (UN/WFP (2012). **Training manual for improving grain post-harvest handling and storage.** WFP. This 246-page document was produced by PHMWG members as reference material to broaden knowledge and strengthen capacities.

documents.wfp.org/stellent/groups/public/documents/reports/wfp250916.pdf

<http://networking.afaas-africa.org/user/register>

Global CoP on PHM by FAO: Get in touch with other organizations/enterprises in PHM and share information

<http://www.fao.org/1000-10SS-reduction/forum/en/>

APPENDIX

S/N	Title	Name (surname first)	Area of specialization	Dr. (Mrs)	EKWEANVA Ndidiamaka Martha	Agricultural Extension Communication, Change, Post harvest technologies and studies
		KOYENIKAN, Margaret J.	Agricultural Extension, Rural Development	31	Dr. (Mrs) EKWEANVA Ndidiamaka Martha	Agricultural Extension Communication, Change, Post harvest technologies and studies
				32	Dr. OMOTESHO Funmilayo	Department of Agricultural Extension Development
				33	Dr. OKOMA chioma Margret	Agricultural Extension and rural soci
				34	Dr. NWAKWASI Rachel	
2	Prof.	AROKOYO Tunji	Agricultural Extension & Advisory Services	34	Dr. Nkeonyere OYEWOLE Mojisola	Agricultural Extension and Development
				35	Dr. Fauziyah	Agricultural Extension and Rural Deve
3	Dr.	UMEH Ogechi Jubilant	Agricultural Extension, Project development, gender studies.	36	Dr. EBANI Sarafat Ayanfunke	Agriculture Extension and Rural Deve
4	Prof.	TOLOGBONSE Emmanuel Bamidele	Agric Extension, Rural Development & Transfer	37	Dr. STOLOMON Ousegun	(Training)
5	Prof.	OMOREGBEE Friday Egbenayabuwa	Programme planning, monitoring and evaluation	38	Dr. AHAMEFULE B A	Agricultural economics, Agribusiness Financial Management
6	Mr.	OHIOMOBA, Ifidon Samuel	Agricultural Extension and Rural Development.	39	Dr. OYEBEMI Ajoke	Agricultural extension and Rural devel
7	Prof.	ADENIJI Bolaji	Agricultural Extension & Rural development	40	Dr. OLATINWO, Kehinde Latifat	Agricultural Extension and Rural Deve
8	Prof.	LAWAL, Olukemi Bosede	Agricultural Extension and Rural Development	41	Dr. Fauziyah	Agricultural Extension and Rural Deve
9	Prof.	MELUDU Nkiru T	Food and Nutrition Security	42	Dr. EBANI Sarafat Ayanfunke	Agriculture Extension and Rural Deve
10	Dr.	IYILADE, Abigail Oluwatumise	Agricultural Extension and Rural Development	43	Dr. ONI Sunday S.	Agriculture Extension
11	Mrs	OLEDIMMA Ngozi U	Food Processing and preservation	45	Dr. OLATUNDE O. A	
12	Mr.	FAMINU Elliot Obafemi	Agricultural Extension/ICT	46	Dr. ALONGE Grace O.	
13	Dr.	AGU-AGUYI Fortune Nneka	Agricultural Economics, Finance and cooperative	47	Dr. OLADAPO L. O	Agriculture Extension
14	Dr.	IFEJIKA, Ikechukwu Philip	Programme Implementation, Youth incubation/ Mentoring and Evaluation, Outreach and Communication	48	Dr. KAGBU Joyce Hauwa	
15	Dr.	OLOOTO Felicia Motunrayo	Agricultural Extension and Rural Development, Kwara State University, Malete.			
16	Dr.	CHIGOZIE Godson-Ibeji, Comfort	Agricultural Extension, Rural Development and Gender Issues.			
17	Dr.	AGBONTALE, Agnes Omoneimi	Agricultural Extension, Rural Development and Nutrition			
18	Mr.	ALI Sunday Ojochonu	Agricultural Economics and Extension			
19	Mrs.	ADEPOJU-OLADIPO Adeola Esther	Agricultural Extension Communication			
20	Dr.	OJO Oluwakemi Aderonke	Agricultural Extension			
21	Mrs.	MAIYAKI Patience G.	Agric Extension communication			
22	Dr.	IGENE Lucky	Agricultural Extension and Rural Development			
23	Mrs.	NKWACHUKWU Daniel Ijeoma	Agricultural extension			
24	Mrs.	IFEJIKA Lilian Ifeoma	processing, value addition and capacity building			
25	Dr.	MICHAEL Clara Obehi	Agricultural Extension with special interest in Urban Agriculture and Gender Issues			
26	Dr.	ABDULRAHMAN Ololade Latifat	Agricultural Extension; Technology transfer for livelihood and Rural Development			
27	Dr (Mrs).	OLATILEWA Mfuliat Oladuntan	Agricultural Economics			
29	Prof.	ONEMOLEASE Eddy	Program evaluation			
30	Dr	UKPAI Kalu	Agricultural Extension Communication			