

Private Sector Meeting

INFORMAL DISCUSSION ON POST-HARVEST LOSSES

HOSTED BY: International Agri-Food Network, www.agrifood.net



DATE, LOCATION :

Tuesday, October 18 / 17:30 - 19:00 / Austria Room C237

SPEAKERS :

MODERATOR: Makbule Koçak, Counsellor, Republic of Turkey

The Scope and Impact of the Losses

Charles Ogang, World Farmers Organisation and President of Ugandan Farmers Federation, Uganda

Storing Grains for Food Security and Sustainability

Digvir Jayas, President, Agriculture Institute of Canada and Vice-President (Research and International) University of Manitoba

Bringing the Cold Chain into Action

Xavier Meignien, Deputy Director, International Institute of Refrigeration, France

MEETING SUMMARY

Participants including member states, philanthropic groups, and the private sector, as well as UN agencies and their partners explored the impact of post harvest losses. From 20% to 50% of post harvest losses are estimated around the world. This leads to hunger and environmental degradation.

Already the UN has expressed the need to address post harvest losses including the Istanbul Plan of Action and the HLPE report on food security. So how can it be done? Many of the needs are well known but there is a lack of knowledge sharing with farmers in developing country. More research is necessary on good storage techniques and more investment is essential in infrastructure.

Strong emphasis was placed on the fact that decreasing post-harvest losses is the

fastest way to increase ag productivity and efficiency.

KEY THEMES & DISCUSSION POINTS, INCLUDING NEW PROJECTS OR PARTNERSHIPS

Charles Ogang, World Farmers Organization and Ugandan Farmers Federation

The impact of these losses on farmers were well described. In Uganda: study on maize shows farmers experience losses:

Recent studies on Maize have revealed that farmers experience losses at various levels as follows:

Level	Estimated Losses	Remarks
Field	12%	prolonged field drying and late harvest
Transportation from Field	1-2%	poor bagging/packaging of the harvest
On-farm drying	6%	inappropriate drying facilities
Shelling and cleaning	2-3%	inappropriate technologies
Storage (4-8 months)	6-8%	poor storage facilities, insect pest infestation and sharing with rates
Total	+(-) 30%	

These losses also apply to legumes and pulses and in fact, they tend to be higher as these two types of crops are more susceptible to insect infestation both in pods and in seed than cereals. For fruits and vegetables, if marketing is not properly organised, losses of up to 80% can occur. Value addition would be the possible solution where fruits are made into juices, syrups/concentrates. Losses in dairy occur for similar reasons, and losses are high in fisheries. In honey, losses of 20% are due to poor extraction technologies.

Digvir Jayas – grain storage losses

In stored grain, deterioration results from interactions among physical, chemical and biological factors. Managing interactions is necessary including environmental factors (solar radiation, wind, precipitation, temperature), insects and pests (bacteria, molds, mites, insects), abiotic, biotic and other factors. He emphasized the moisture temperature combination has to be managed. Concrete steps can address all these factors.

The Canadian Wheat Board Centre for Grain Storage Research is the most advanced research facility of this type in the world to test grain drying, handling, cleaning and

storing. There they can simulate weather conditions in other part of the world and have done research on problematic approaches like floor drying and certain types of bags.

Xavier Meignien – role of cold chain

A quarter of perishable foods are lost due to lack of cold chain in LDCs. As food moves from the farm to the consumer, it often misses cold storage at various points. Unfortunately, refrigeration cannot compensate for previous temperature discrepancies or for lack of hygiene.

Setting up a cold chain is not economically viable if produced volumes are inefficient, but this is a catch-22 as insufficient cold chains inhibit increases in production. In hot countries, refrigeration is technically and economically difficult. Market for new types of equipment designed for this climate is limited so more R&D needed to find cost-effective solutions such as thermal storage and evaporative cooling. Often a chain is best developed when focused on a specific product such as dairy, meat or a fruit. Improving the efficiency of that chain demands care at interfaces between cold chain links such as open doors, crates, and poor loading which can be managed by best practices. A dialogue is needed between production/logistics/cold chains to design new equipment and systems.

MAIN CONCLUSIONS

The problem of post harvest losses is not limited to the Least Developed Countries but also developed countries.

Key recommendations:

Build storage facilities and cold chain mechanisms.

Rural infrastructure is required such as roads, linkages to railways and ports

Agronomic knowledge must be better shared, including meteorological and pest identification

Consumer education on food waste

Risk management tools for farmers on weather and market demands

More use of compost to reuse waste material

Fundamentally, the best way to find solution to agricultural output is to reduce losses and wastes.