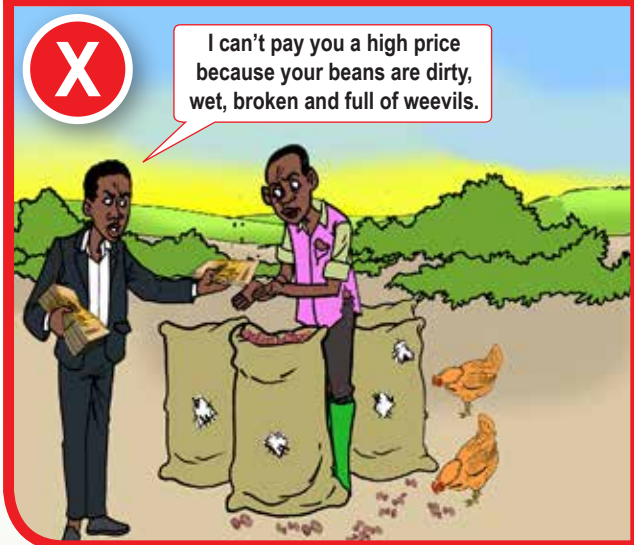


## COSTS OF BAD PRACTICES



## WHY STANDARDS MATTER

Complying with the dry beans standards increases returns for those in the market chain.

- **Farmers** get better prices and reduce post-harvest losses. They can participate in the Warehouse receipt system where they can store the beans until the price improves, and take a bank loan using their beans as surety.
- **Traders** get a reliable supply of quality dry beans that they can sell to their clients. When dry beans conform to the standards, and is available in large quantities, it is easier to sell to high value markets with less risk of the grain being rejected by the buyer.
- **Processors** want a continuous and reliable supply of high quality beans. Complying with the standards reduces waste and ensures that the final product is of high quality and earn a higher price.
- **Consumers** get food that is safe and nutritious to eat.

## BENEFITS OF GOOD PRACTICES



## ACKNOWLEDGEMENTS

This brochure was prepared in collaboration with a group of interested stakeholders including:

- Afro-KAI Ltd
- Aponye Uganda Ltd
- ASKAR General Merchandise Ltd
- Chemiphar Uganda Ltd
- Eastern Africa Grain Council
- INTERTEK Testing Services (EA) (Pty)
- Kilimo-Trust
- Ministry of Agriculture, Animal Industry & Fisheries
- Ministry of Trade, Industry and Cooperatives
- National Agricultural Advisory Services
- National Agricultural Research Organisation
- Rikolto - VECO
- SEATINI Uganda
- The Grain Council of Uganda
- Uganda National Bureau of Standards
- Uganda National Chamber of Commerce and Industry
- Uganda National Farmers Federation
- USAID Feed the Future Commodity Production and Marketing Activity
- USAID Feed the Future Uganda Enabling Environment for Agriculture Activity
- World Food Programme
- FIT Uganda
- Makerere University Kampala

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**Dry Beans - Best Practices for Improved Nutrition and Incomes:**

**HANDLE BEANS WITH CARE AND KEEP THEM CLEAN**



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# Dry Beans - Best Practices for Improved Nutrition and Incomes: Handle Beans with Care and Keep them Clean

## GOOD PRACTICES



Winnow, Sort and grade beans before storage and selling



Keep the storage room clean all the time



Control pests and vermin with recommended methods such as pesticides



Keep animals away from threshing, drying and storage facilities

## STANDARD IMPACTED

### ORGANIC MATTER:

Organic matter is any animal or plant matter (seed coats, straws, weeds) other than beans, damaged beans inorganic extraneous matter and harmful/toxic seeds.

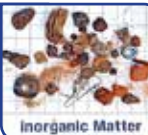


### PESTICIDE RESIDUES

A pesticide is a chemical that is used to prevent, destroy, or repel pests. Most pesticides contain chemicals that can be harmful to people, animals, or the environment. Dry beans shall comply with pesticide residue limits established by the Codex Alimentarius Commission for this commodity.

### INORGANIC MATTER:

Inorganic matter is matter other than beans comprising of: metallic pieces, shale, glass, dust, sand, gravel, stones, dirt, pebbles, lumps or earth, clay and mud.



### FOREIGN MATTER:

This is all organic and inorganic matter other than dry beans or other food grains.

Characteristic	Maximum Limit		
	Grade 1	Grade 2	Grade 3
Foreign matter, % m/m	0.5	0.75	1

Foreign Matter = Organic Matter + Inorganic Matter



### PEST DAMAGED BEANS:

Pest damaged beans are dry beans with obvious weevil-bored holes or which have evidence of boring or tunneling, indicating the presence of insects, insect webbing or insect refuse; grains chewed in one or more than one part of the grain which exhibit evident traces of an attack by vermin.



Characteristic	Maximum Limit		
	Grade 1	Grade 2	Grade 3
Pest damaged bean, % m/m	1	2	3

### FILTH:

Filth are impurities of animal origin for example animal bone fragments, bird excrement and rat droppings.

Characteristic	Maximum Limit		
	Grade 1	Grade 2	Grade 3
Filth, % m/m	0.1		



### BROKEN/SPLIT BEANS:

These are beans whose cotyledons have been separated or one or both of the cotyledons have been broken.

Characteristic	Maximum Limit		
	Grade 1	Grade 2	Grade 3
Broken/split, % m/m	1	2	3



### OTHER CONTAMINANTS:

These are metals such as arsenic, cadmium, lead and mercury which are natural occurring chemical compounds at various levels in the environment e.g. soil, water and atmosphere. Metals can occur as residues in food because of their presence in the environment, as a result of human activities such as farming, industry or car exhausts or from contamination during food processing and storage. People can be exposed to these metals from the environment or by ingesting contaminated food or water. Their accumulation in the body can lead to harmful effects over time.

Heavy metal	Maximum limit for all grades
Lead, mg/kg	0.2
Cadmium, mg/kg	0.1

## BAD PRACTICES

Do not thresh beans from an unclean place, bare ground or tarmac



Avoid excessive beating / hitting beans when threshing



Do not add stones, sand and small metals



Do not let pests damage the grain



Do not store beans on the ground and in the same store with animals



Do not store beans in the same store with pesticides/chemicals

