



MARKUP

EU-EAC MARKET ACCESS UPGRADE PROGRAMME

European Union Standards to be Considered in Harmonisation of EA Standards for Selected Agricultural Export Products

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MARKUP is a regional trade development initiative funded by the European Union with support from the Federal Government of Germany, which aims at addressing both the supply side and market access constraints of selected key export-oriented sectors in Burundi, Kenya, Rwanda, Tanzania and Uganda. The priority value chains are coffee, tea, cocoa, avocado, and selected horticultural products. The overall objective of the programme is to contribute to the economic development of the EAC region by increasing the value of both extra- and intra-regional agricultural exports, with the main focus on exports towards the European Union.

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1. Background

The East African Community (EAC), through the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), is implementing an initiative called the EU-EAC Market Access Upgrade Programme (MARKUP) which is focusing on increasing the participation of small and medium-sized enterprises (SMEs) in intra-regional and the European Union trade of coffee, tea, cocoa, spices, oilseeds and horticultural produce value chains. In this endeavour, GIZ in partnership with the EAC partner states, is implementing interventions to improve harmonization of East African (EA) Standards of commodities falling under the priority value chains that have demonstrable potential for export to the European union. A standard is a document approved by a recognised body that provides for common and repeated use, rules, guidelines or characteristics of products and their related processes or production methods. It may cover terminology, symbols, packaging, marking or labelling requirements. Although compliance with standards is voluntary, most of the EA food standards are mandatory. For enhancement of free movement of goods within a given region and between a region or country and another region or country, countries harmonize (agree on common) standards or jointly develop standards for the goods.

The harmonisation of EA standards is governed by the EAC Standardisation, Quality Assurance, Metrology and Testing (SQMT) Act of 2006. The objective of this Act is to harmonize national and East African Standards with international standards in order to reduce costs, enhance compliance and develop trade opportunities, and facilitate regional and international trade.

The EAC recognises that harmonised standards are an essential requirement for greater economic integration since they encourage the free movement of goods within the community. They have the potential to stimulate intra-regional trade which, in turn, can lead to enhanced value addition and prosperity for the whole region. They also foster the creation of larger regional markets which allow businesses to realise economies of scale necessary for entering international markets with competitive products. In addition, if regional standards are harmonised based on internationally recognised standards, they facilitate the access to international high-value markets. The intention to focus on the Eu market for the MARKUP priority commodities, requires that harmonised EA standards are not only based on international standards but also, the Eu standards.

As an initial step in improving harmonisation of EA standards, MARKUP collected information on the EU and Codex Technical Barrier to Trade (TBT) and Sanitary and Phyto-Sanitary (SPS) requirements for the MARKUP priority commodities - coffee, cocoa, tea, spices, oilseeds and horticultural products. These requirements were used in an assessment of gaps and needs to review the existing EA standards. This Policy Brief outlines some of the key findings of the assessment. It summarises the existing EA standards to be reviewed and parameters (TBT and SPS requirements thereof) to be amended for the standards to be in harmony with the EU standards for Coffee, Tea, Cocoa, Horticultural Produce, Oilseeds and Spices and related products. It also makes recommendations to strengthen the process of development and harmonisation of standards in line with the SQMT Act.

2. Why should EAC strive to adopt EU requirements in EA standards?

A recent analysis of EAC export trends indicates that, between 2013 and 2017, food items and agricultural raw materials accounted for 51% of the region's total exports. The volume of food exports increased almost 9-fold between 2000 and 2017, with Kenya, Tanzania and Uganda's exports being mainly to the EU. Agricultural products, including coffee, tea, and horticultural products continue to dominate EAC exports to the EU. Overall, the EU remains a key trade and investment partner for the EAC region.

Competitiveness in trade is largely influenced by non-tariff barriers (NTBs), especially those that relate to Technical Barriers to Trade (TBT) and Sanitary and Phyto-Sanitary (SPS) standards. In that regard, EAC agricultural products exported to the EU must comply with the EU or international TBT and SPS standards. Thus, basing harmonized EAC Standards on EU TBT and SPS requirements increases the likelihood of these commodities to access the EU market, ultimately facilitating the access to high-quality and profitable markets in that region.

3. EA standards to be developed or reviewed with a focus on EU standards

Since 1995 Codex standards are recognised by the World Trade Organisation as benchmarks for international trade of food, under the SPS and TBT Agreements. Basically, this implies that any food complying with Codex standards may be traded freely among WTO member states. Nonetheless, WTO agrees that certain Codex requirements cannot provide equal protection for all its member states. Thus, a country that feels that a Codex standard or requirement is not sufficiently protective, may perform independent risk assessment and use the outcome of that assessment to justify a more stringent requirement. The WTO SPS agreement requires further that any independent measure adopted is applied only to the extent necessary to protect human, animal or plant life or health. Based on this agreement, the EU maintain some SPS requirements that are different from the Codex requirements. The standards gap analysis performed by MARKUP revealed that certain EU limits are more stringent than the Codex limits on pesticide residues, mycotoxins, heavy metals, extraction solvents, food additives, flavour control, fruit content and fruit brix. Meaning that EAC SMEs intending to access the EU market have to comply with the EU limits. It is imperative therefore for the EAC standards for these commodities are reviewed to consider adoption of the EU requirements.

Table1: EA Standards for MARKUP focal products that are recommended for review

Value Chain	Product Name	EA standard Reference	Requirements to be addressed
Coffee	Roasted ground coffee	EAS 105:2008	<ul style="list-style-type: none"> • Pesticide residues (Various), • Mycotoxins (Ochratoxin A -OTA, Aflatoxin B1), • Extraction solvents (Methyl acetate, Dichloromethane, Ethylmethylketone)
Tea	Green tea	EAS 921:2018,	<ul style="list-style-type: none"> • Pesticide residues (various)
	Black tea	EAS 28:2019	
	Instant tea	EAS 923:2019	

Value Chain	Product Name	EA standard Reference	Requirements to be addressed
	Flavoured black Tea,	EAS 922:2018	
Horticultural produce	Fresh Mangoes	EAS 329:2017	<ul style="list-style-type: none"> • Pesticide residues (various), • Heavy metals (Cadmium)
	Passion Fruit	EAS 91:2017	<ul style="list-style-type: none"> • Pesticide residues (Lambda-cyhalothrin), • Heavy Metals (Lead, Cadmium)
	Juices and Nectar	EAS 948:2019	<ul style="list-style-type: none"> • Mycotoxins (Patulin) • Heavy metals (Lead, Tin), • Technical Barriers to Trade (Flavour control, Minimum juice and/or purée content, Minimum Degree Brix values)
	Avocado Fresh Fruit	EAS 19:2017	<ul style="list-style-type: none"> • Pesticide residues (various)
	Avocado oil for cosmetic industry	EAS 837:2019	<ul style="list-style-type: none"> • Heavy metal (Lead)
	Snow peas	EAS 759:2013	<ul style="list-style-type: none"> • Pesticide residues (various), • Heavy metal (Lead)
Cow Peas	EAS755:2013		
Lentils	EAS760:2013		
Oil seeds	Sesame	EAS 86:2017	<ul style="list-style-type: none"> • Pesticide residues (various) • Mycotoxins (Aflatoxins)
	Groundnuts	EAS 888:2018	
	Groundnut for oil extraction	EAS 889:2018;	<ul style="list-style-type: none"> • Mycotoxins (Aflatoxins)
Spices	Ginger	FDEAS 916:2018 –	<ul style="list-style-type: none"> • Pesticide residues (various), • Mycotoxins (OTA, Aflatoxins), • Food additives (various), • Mycotoxins (OTA, Aflatoxins)
	Turmeric	FDEAS 917:2018	
	Clove	FDEAS 918:2018	

4. EU requirements on pesticide residues

Unavoidably the use of pesticides in food production leads to pesticide residues in the food and feed. Therefore, Codex and other food safety regulatory bodies set maximum residual levels (MRLs) of pesticides in food and feed to protect humans from health effects of pesticides. Globally MRLs are prescribed by the Codex Alimentarius Commission through the FAO/WHO Codex Committee on Pesticide Residues in Food with scientific guidance from Joint Committee Meeting on Pesticides Residues (JMPR). European Commission also

prescribes MRLs for pesticides for food for human consumption in the EU. Table 2 shows the Pesticide residual limits set by the EU for coffee, tea, cocoa, spices, oilseeds and horticultural products for which there are not respective Codex limits or where they exist are less stringent.

Table 2: EU Maximum Residue Limits (MRLs) for pesticides in MARKUP Priority Commodities

Commodity	Name of Pesticide	MRL (mg/kg)
Roasted and ground coffee	Clomazone	0.05
	Deltamethrin	5
	Difenoconazole	0.05
	Fenazaquin	0.01
	Fenipicoxamol	0.05
	Fenamidone	0.1
	Fluopicolide	0.02
	Propargite	0.05
	Thiacloprid	0.05
	Valifenalate	0.02
Black Tea, Flavoured balack tea, Green Tea and Instant Tea	Cyantraniliprole,	0.05
	Cymoxanil,	0.1
	Difenoconazole,	0.05
	Fenamidone,	0.05
	Folpet,	0.1
	Mandestrobin,	0.05
	Mepiquat,	0.1
	Metazachlor,	0.1
	Propargite,	10
	Pyrimethanil,	0.05
	SulfoxaflorTrifloxystrobin	0.05
	Chlorantraniliprole	0.05
	Fenazaquine	0,02
Valifenalate	1.0	
Fresh Mangoes	Cypermethrins(Including alpha- and cypermethrin)	0.01
	Endosulfan	0.01
	Dithiocarbamate	0.1
	Trifloxystrobin	0.01
	Bromide Iron	0.01
	Pyrimethanil	0.01
	Spirotetramat	0.03
	Sulfoxaflor	0.1
	Tebuconazole	2
	Thiobendazole	0.01
	Fenipicoxamol	0.01

Commodity	Name of Pesticide	MRL (mg/kg)
	Chlorantraniliprole	0.01
Passion fruit	Lambda-cyhalothrin	0.01
Avocado Fresh Fruit	Cyatraniliprole	0.01
	Deltamethrin	0.01
	Folpet	0.03
	Fludioxonil	50
	Lambda-cyhalothrin	0.01
	Pyrimethanil	0.01
	Trifloxystrobin	0.01
	Propargite	0.6
	Thiacloprin	0.01
	Thiobendazole	0.01
	Fenpicoxamol	0.01
	Cyclaniliprole	0.01
Snow peas	Cyantraniliprole	0.01
	Cymoxanil	0.3
	Deltamethrin	0.05
	Fenarnidone	0.2
	Folpet	0.01
	Mandestrobin	0.3
	Metazachlor	0.02
	Propamocarb	0.02
	Pyrimethanil	0.01
	Trifloxystrobin	0.01
	Fenpicoxamol	0.09
Lentils	Cyantraniliprole	0.01
	Cymoxanil	0.3
	Deltamethrin	0.05
	Fenarnidone	0.2
	Folpet	0.01
	Mandestrobin	0.3
	Metazachlor	0.02
	Propamocarb	0.02
	Pyrimethanil	0.01
	Trifloxystrobin	0.01
	Fenpicoxamol	0.09
	Chlorantraniliprole	0.01
	Fenazaquin	0.01
	Valifenalate	0.01
Cow peas	Cyantraniliprole	0.01
	Cymoxanil	0.3
	Deltamethrin	0.05
	Fenarnidone	0.2

Commodity	Name of Pesticide	MRL (mg/kg)
	Folpet	0.01
	Mandestrobin	0.3
	Metazachlor	0.02
	Propamocarb	0.02
	Pyrimethanil	0.01
	Trifloxystrobin	0.01
	Fenpicoxamol	0.09
	Chlorantraniliprole	0.01
	Fenazaquin	0.01
	Valifenalate	0.01
	Sesame seeds	Cyantraniliprole
Deltamethrin		0.02
Fenarnidone		0.01
Folpet		0.07
Mepiquat		0.05
Metazachlor		0.02
Sulfoxaflor		0.02
Fenpicoxamol		0.01
Chlorantraniliprole		0.02
Ginger		Clomazone
	Cyantraniliprole,	0.2
	Cymoxanil,	0.1
	Deltamethrin	0.5
	Dimethoate	0.05
	Fenamidone	0.1
	Fuopicolide,	0.05
	Folpet,	0.1
	Fosetyl	0.1
	Fluoxastrobin	0.05
	Isodione	0.05
	Malathion	0.05
	Fenpicoxamol	0.05
	Chlorantraniliprole	0.05

5. EU requirements on contaminants

A contaminant is any substance not intentionally added to food which is present in it as a result of the production, manufacture, processing, preparation, treatment, packing, packaging, transport or holding of such food, or as a result of environmental contamination. Mycotoxins, heavy metals and extraction solvents are contaminants of relevance to the MARKUP priority foods.

In order to protect human health and facilitate fair trade, Codex Alimentarius Commission and other food safety agencies set maximum tolerable limits for contaminants in foods. Maximum

limit (ML) for a contaminant in a food or feed commodity is the maximum concentration of that substance legally permitted in that products. MARKUP has observed discrepancy in the MLs set by the EU and Codex for certain MARKUP priority commodities. The EU MLs for which there are equivalent Codex MLs or the Codex MLs are less stringent are shown in Table 3 (for mycotoxins), Table 4 (for heavy metals) and Table 5 (for extraction solvents).

Table 3: EU Maximum limits (MLs) of Mycotoxins in various MARKUP Priority Commodities

Commodity	Name of Pesticide	MRL ($\mu\text{g}/\text{kg}$)
Roasted and ground coffee	Ochratoxin A (OTA)	5.0
	Aflatoxin B ₁	5.0
Fruit juices and Nectars	Patulin	50
Sesame seeds	Aflatoxin B ₁	8.0
	Total Aflatoxin (B ₁ , B ₂ , G ₁ , G ₂)	15.0
Groundnuts for Oil Extraction	Aflatoxin B ₁	5.0
	Total Aflatoxin (B ₁ , B ₂ , G ₁ , G ₂)	10.0
Ginger/Turmeric	Ochratoxin A	15
	Aflatoxin B ₁	5.0
	Total Aflatoxin (B ₁ , B ₂ , G ₁ , G ₂)	10.0
Clove	Aflatoxin B ₁	5.0
	Total Aflatoxin (B ₁ , B ₂ , G ₁ , G ₂)	10.0

Table 4: EU Maximum limits (MLs) of Heavy metals in MARKUP Priority horticultural products

Commodity	Name of Pesticide	MRL ($\mu\text{g}/\text{kg}$)
Fresh mangoes	Cadmium	0.05
Passion Fruit	Lead	0.2
	Cadmium	0.05
Fruit juices and Nectars	Lead	0.05
	Tin (inorganic) (canned)	100
Avocado oil for cosmetic industry	Lead	0.1
Snowpeas, Lentils and Cow peas	Lead	0.2

Table 5: EU Maximum limits (MLs) of Extraction solvents in roasted and ground coffee

Name of Pesticide	MRL (mg/kg)
Methyl acetate	20
Dichloromethane	2
Ethylmethylketone	20

6. EU requirements on food additives

Codex¹ defines food additive as any substance not normally consumed as a food by itself and not normally used as a typical ingredient of the food, whether or not it has nutritive value, the intentional additional of which to food for a technological (including organoleptic) purpose in the manufacture, processing, preparation, treatment, packing, packaging, transport or holding of such foods result, or may be reasonably expected to result (directly or indirectly) in it or its by-product becoming a component of or otherwise affecting the characteristics of such foods. The term does not include contaminants or substances added to food for maintaining or improving nutritional quality.

At international level, permissible food additives are prescribed by the Codex Alimentarius Commission through the Codex Committee on Food Additives with scientific guidance from Joint FAO/WHO Expert Committee on Food Additives (JECFA). The codex standard on food additives has a schedule which among other things includes name of the food additive and corresponding International Numbering Systems (INS), type of food in which it can be applied, maximum levels for application and purpose(s) for its use. Codex has not yet set MLs for additive in Ginger, but the EU has set the MLs shown in Table 6. As such any person or company exporting ginger to the European Commission must comply with the limits set for Ginger.

Table 6: EU MRLs of Food Additives in Ginger

Name of additive	ML (µg/kg))
Caramel IV Sulphite ammonia	10000
Caramel III Ammonia caramel	50000
Brilliant blue	100
Canthaxanthin	20
Carotines, beta vegetables	500
Carotenoids 160 a(ii),	500
Copper complexes 14(i)(ii)	500
Fast green FCF	100
Indigotine (Indigo carmine)	300
Ponceua 4R (Cochineal red A)	500
Sunset yellow	300
Acesulfame	2000
Sucralose	400
Aspartame	200

7. EU requirements of flavour control, fruit content and fruit brix in Fruit juice and Nectars

EA and Codex standards for Fruit Juices and Nectars state that flavour obtained by suitable physical means from the same species of fruit may be restored to the juice. The respective EU standard restricts the source of flavour and types of physical means. It states that flavours for restoration are obtained during the processing of the named fruit by applying physical

¹ General standard for food additives (Codex Stan 192-1995)

processes such as squeezing, extraction, distillation, filtration, adsorption, evaporation, fractionation and concentration, to retain, preserve or stabilize the flavour quality. The EU regulation also restricts juice content and degree Brix values for juice and nectars from mangoes as shown in Table 6.

Table 7: Juice content and Degree Brix Values for Fruit nectars from Mangoes

Minimum juice and/or purée content (% by volume of finished product)	Minimum degree Brix values for reconstituted fruit juice and reconstituted fruit purée
25	15

8. Policy recommendations

The following recommendations are made to progress adoption of EU standards in EA standards for the MARKUP priority products:

1. Partner States and EAC Secretariat to strengthen research and data generation to inform the standard development and harmonisation process
2. EAC Secretariat to carrying out risk and achievability assessments to inform the process of adopting the EU limits in the EA standards.
3. The EA Standards Management Committee to require the relevant technical committee to initiate the work of reviewing standards for the commodities for which the review of EA standards is required.
4. EAC to advocate for more resources to ensure that the harmonisation process is more inclusive
5. EAC to explore the development of horizontal standards for selected parameters (such as maximum limits of contaminants, pesticide residues and food additives) that are common to several products.