

Metrology in Chemistry

AFRIMETS GA 2009



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WG Chair

Your measure of excellence

Why do we need MiC?



- The Lake Victoria Fish Industry: The cost of the losses to the Ugandan economy alone of the fish ban which lasted from March to July 1999 was estimated at about US\$ 36.9 million, excluding the cost effect on the fishermen (estimated to be US\$1 million per month).
- Harmonized European standards on aflatoxin B1 – a common contaminant affecting agricultural products – could jeopardise African exporters of nuts, cereals and dried fruits reportedly worth US\$670 million a year
- In Cote D'Ivoire, fisheries employ more than 420,000 workers and in Guinee-Bissau, while the employment figure is lower at around 120,000 workers, fisheries represent 4% of the GDP and 43% of the State's overall budget.

Overview

- Members
- Structure
- Programme
 - Country Introductions
 - Workshop on PT Schemes
- Past Activities
- Action Plan



Members Present



- Present at the meeting (8)
 - South Africa (SADC), Kenya (EAMET), Uganda (EAMET), Tanzania (SADC), Zimbabwe (SADC), Cote d'Ivoire (SOAMET), Ghana (NEWMET), *Tunisia (MAGMET)*
- Apologies
 - Egypt, Rwanda

Programme



- Country Overviews
 - Detailed presentations of the activities in all participating countries
 - Intense discussions on approaches and practices of the countries
 - Common areas of interest identified

Country Overviews



Area	TBS	UNBS	KEBS	GHANA	ZIM	NMISA
Inorganic Chem	Heavy metals	water – heavy metals and cations	Fortification in food and toxic heavy materials	Metallic contaminants		Speciation; heavy metals in food
Organic Chem		maize and cereal (moisture, ash, protein and fats);				
Organic/ Bioanalysis	Mycotoxins & melamine	Mycotoxins& melamine	Melamine in milk and mil products	Mycotoxins		Mycotoxins in maize & melamine in milk
Organic/Bio			Aflatoxins in coffee			
Organic/Bio	Pesticide residues	pesticide residues		pesticide residues in Chocolate; Cocoa; Pineapple; Pear; Fresh tomatoes	pesticide residues	Persistent organic pollutants; Dioxins
Organic/Bio	Antibiotic resides	Antibiotic	Antibiotics and steroid growth promoters in food			Chloram-phenicol in milk
		honey (HMF)				
Inorganic	Health diagnostic equip/reagents		Migration of contaminants from packaging materials			
			Breath alcohol calibration	Breath alcohol calibration	Breath alcohol calibration	Breath alcohol calibration
Gas			Purity of medical gases		Required by industry	Purity analysis of gases

Actions



- PT Schemes

Scheme	Coordinator	Status	Action
Wheat Flour	KEBS	Round 4	Sample Prep PT Sept-Dec 09
Edible Salt	TBS	Round 4	Sample Prep PT Sept-Dec 09
Edible Oil	UNBS	Round 2	Sample Prep PT Sept-Dec 09
Water Chemistry Microbiology	NAMWATER UNBS	Round 5 Round 2	
Aqueous Ethanol	NMISA	New	Call for Participants

Actions (continued)



- Questionnaire
 - Development of a questionnaire to compile the picture of chemical activities throughout Africa
 - Will be used for the MiC RoadMap (GA2010)
- MiC Guideline
 - Based on the APMP document
 - Adapt with local case studies
- MiC Structure/Officers
 - Agreement of the structure at the GA
 - Appointment of the officers by email after meeting

A Structure for AFRIMETS MiC



- **CCQM-based**

- Organic
- Inorganic
- Gas
- Surface Analysis
- Bio Analysis
- Electrochemistry
- KCWG

- **Level-based**

- CCQM Matters
- (PT Coordination)
- Accreditation Support
- Development and Awareness
- Training

Actions (continued)



- Webpage
 - All relevant documents
 - ‘Country space’ for announcements
 - Communication is critical!!!
- Training Programme
 - Waiting for outcome of the questionnaire
 - Train-the-trainer will be critical component



Thank you!

Tanzania exported \$140 million worth of fish in 1998, but due to hygiene and other safety concerns a major market banned imports, resulting in 50% loss of exports and 60,000 job losses. Integrated assistance (cost approx. \$ 700,000) to improved processing/ handling, better **quality inspection** and setting up **recognized laboratory services** enabled restart of exports in 1999