
Impact of Environmental Requirements on Key Sectors in the Arab Region

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Outline of Presentation

- Part I TBT and SPS Agreements
- Part II Conceptual and Methodological Framework
- Part III Textile/Garment Sector
- Part IV Pharmaceutical Industry
- Part V Agro-Food Sector
- Part VI New EC Regulations affecting the Electronic Industry



PART I:
**WTO Agreement on
Technical Barriers to Trade (TBT)
and
WTO Agreement on Sanitary and
Phytosanitary Standards (SPS)**

**WTO Agreement on
Technical Barriers to Trade**

- TBT Agreement recognizes the right of Members to set product requirements, as long as technical regulations:
 - **Do not create unnecessary obstacles to trade;**
 - **Are not more restrictive than necessary; and**
 - **Are legitimate** (e.g., based on science, available technology, etc.)
- Applies to industrial and agricultural goods
- Exception for government procurement
- Exception for Sanitary & Phytosanitary (SPS) measures (since these are addressed under the SPS Agreement)

Technical Regulations

- “Document which lays down **product characteristics** or their **related processes and production methods**, including the applicable administrative provisions, with which compliance **is mandatory**.”
- “It may also include or deal exclusively with terminology, symbols, packaging, marking and labelling requirements as they apply to a product, process or production method.”
 - TBT Agreement, Annex 1.1
- **Technical regulations should be based on performance, rather than design or descriptive characteristics** (TBT Agreement, Article 2)

Standards

- “Document approved by a recognized body, that provides, for common and repeated use, rules, guidelines or **characteristics for products or related processes and production methods**, with which compliance is **not mandatory**.”
- It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method.”
 - TBT Agreement, Annex 1.2

WTO Preference for Harmonization

- The TBT Agreement strongly encourages Members to adopt regulations that are the same (or *nearly* the same) as standards formulated by international standard-setting bodies
 - Calls on countries to “play a full part, within the limits of their resources,” to the work of international standardizing bodies for which they have adopted, or plan to adopt, technical regulations.
- Encourages, but does not require, harmonization with international standards.
- ★ **Remember: WTO Agreements do NOT contain standards, but provide the rules governing how standards might be adopted and applied with respect to trade.**

Conformity Assessment

- “Any procedure used, directly or indirectly, to determine that relevant requirements in technical regulations or standards are fulfilled.”
- “includes, *inter alia*, procedures for sampling, testing and inspection; evaluation, verification and assurance of conformity, registration, accreditation and approval as well as their combinations.”

- TBT Agreement, Annex 1.3
- TBT Agreement solicits the harmonization of conformity assessment procedures as extensively as possible, taking into consideration limits to Member State resources (e.g, difficulties faced by developing countries).

Conformity Assessment

Components:

1. Standards
2. Technical Regulations
3. Accreditation (governmental/non-governmental)
4. Certification
5. Testing and Monitoring
6. Inspection (including customs)

* Trade facilitation enhanced if technical regulations are harmonized or approximated regionally/globally, including conformity assessment procedures;
Reduces risk of non-tariff barriers to trade.

Transparency and Information Dissemination

- Members must **NOTIFY** the WTO about any technical regulation that they intend to adopt that:
 - May have a significant impact on trade;
 - Are proposed under the terms of Article XX (exceptions)
- Member States generally have **2 months to comment on draft regulations prior to adoption**
 - Discussion on whether time should be lengthened to 6+ months given difficulty for developing countries.
- **WTO Secretariat maintains a Central Registry for Notifications & WTO Members must maintain a WTO Enquiry Points to provide access to that info**
 - Problem is only Member State Governments have the right to directly access these services.

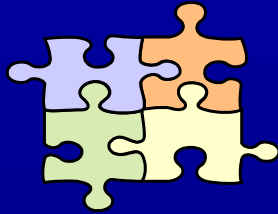
Notifications to the WTO (2000)

Objectives and Rationales	Notifications received in 2000
Consumer Information, Labelling	59
Prevention of Deceptive Practices and consumer protection	55
Protection of Human Health or Safety	254
Protection of Animal or Plant Life or Health	10
Protection of the Environment	58
Quality Requirements	61
Harmonization	74
Adaptation to New Domestic Law and Technology	80
Lowering or Removal of Trade Barriers	13
Trade Facilitation	6
Cost Saving and Increasing Productivity	6
Others	43
Not specified	6
Total	725

Source: WTO

Agreement on Sanitary and Phytosanitary Measures (SPS)

- Allows adoption of SPS measures “only to the extent necessary to protect human, animal or plant life or health” (Art. 2.2)
- Strongly based on need for justification under scientific principles and evidence (Art. 2.2).
- While Agreement supports harmonization with international standards, more rigorous measures can be adopted if scientifically justified (Art. 2.3)
- SPS measures may be adopted on a temporary basis when scientific evidence is *not* fully available and is being sought to conduct a risk assessment within a reasonable period of time. (Art. 5.7)
- Allows for Special and Differentiated Treatment for Developing Countries (Art. 10).



PART II:

Conceptual & Methodological Framework

Four Types of Standards in International Trade

- 1. Product Requirements**
 - For example, maximum contents requirements of carcinogenic or radioactive elements in foods or textiles; packaging requirements
- 2. Production & Process Methods (PPMs)**
 - For example, water effluent standards, stack emissions on air pollution; use of organic inputs – often are domestic standards
- 3. Conformity Assessment**
 - To prove conformity with product or PPM requirements.
 - Requires access to accredited laboratories (oftentimes based abroad), advanced understanding of certification and testing procedures
 - Increases the cost of compliance
- 4. Dispute Resolution**
 - Public International Law = Inter-governmental dispute resolution – could go to WTO (highly politicized)
 - Private contract law = between firms; suppliers often disadvantaged.

Regulatory v/s Voluntary

Measures may be:

- **Regulatory** (*technical regulations*)
 - Required by governments and enforced by customs administrations and ministries (e.g., health, environment, trade);
 - For WTO Member States, these measures must respect provisions in WTO Agreements.

- **Voluntary** (*standards*)
 - Adopted by governments, but not mandatory
 - Required by private importers and/or retailers via contracts and pre-shipment inspections.
 - Often time cater to Niche Markets generated by consumer demand.

Conceptual Framework

Thus, when considering the impact of environmental measures on output or trade, and possible policy implications and responses, one might think in terms of the following box

	Product Standards	Process & Production Methods	Conformity Assessment	Dispute Resolution
Regulatory Measures	<ul style="list-style-type: none"> • Environment, Health & Safety Laws 	<ul style="list-style-type: none"> • Compliance with Domestic Environmental Laws 	<ul style="list-style-type: none"> • Laboratory Accreditation, testing and certification 	<ul style="list-style-type: none"> • WTO • Regional or bilateral negotiations
Voluntary Measures	<ul style="list-style-type: none"> • Industry Standards & Specifications 	<ul style="list-style-type: none"> • Eco-labeling • Niche Markets 	<ul style="list-style-type: none"> • Eco-labeling • Importer testing 	<ul style="list-style-type: none"> • Private Contract Law

Measuring the Cost of Compliance with Standards & Regulations

METAP MedPolicies Initiative: The Larson Model

- Simple (5 variables; Excel-based)
- Empirically tractable partial-equilibrium model
- Economic forecasting policy tool
- Estimates the percentage change in output, exports and imports from compliance with a standard or technical regulation (focus on environmental requirements)
- Environmental measure examined may be voluntary or regulatory and required in a destination market or by domestic environmental regulation, or the impact of a generic increase in the cost of production could be estimated.



Larson Model

The methodology is based on five main questions:

- 1) What is the environmental policy change?
- 2) How and by how much does the policy change raise costs to business (initially)?
- 3) By how much might output levels adjust to such cost increases?
- 4) How will these output changes translate into changes in trade flows?
- 5) How will the answers to Questions 2-4 change if the regulatory change provides stronger incentives for industries to become more efficient in their operations and/or if these industries are able to pass along some of the regulatory costs to buyers in national and international markets?




PART III:

Standards & Technical Regulations Impacting the Textile & Garment Sector

Textiles

Textile finishing stages of production

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    graph LR
    A[Singeing] --> B[Desizing]
    B --> C[Bleaching]
    C --> D[Mercerizing]
    D --> E[Dyeing]
    E --> F[Printing]
    F --> G[Finishing]
    
```

Characteristics of wastewater effluent from the textile finishing stage

Desizing	Scouring	Bleaching	Mercerizing	Dyeing
<ul style="list-style-type: none"> •High BOD •Neutral pH •High total solids 	<ul style="list-style-type: none"> •High BOD •High alkalinity •High total solids •High temperature 	<ul style="list-style-type: none"> •High BOD •Alkaline •High solids 	<ul style="list-style-type: none"> •Low BOD •Alkaline •Low solids 	<ul style="list-style-type: none"> •High BOD •High solids •Neutral to alkaline

Textile/Garment Industry in Arab Region: Most Troublesome Environmental Requirements

	Product Standards	Process & Production Methods	Conformity Assessment	Dispute Resolution
Regulatory Measures	<ul style="list-style-type: none"> Azo dyes Flame retardants Heavy metals Labeling Packaging 	<ul style="list-style-type: none"> Compliance with domestic environmental laws: wastewater effluent treatment Rules of origin 	<ul style="list-style-type: none"> High cost of product testing prior to export Limited number of accredited labs in region 	<ul style="list-style-type: none"> Communication links between firms & trade ministries poor Politicization of inter-government dispute settlement
Voluntary Measures	<ul style="list-style-type: none"> Eco-labeling 	<ul style="list-style-type: none"> Eco-labeling ISO Labor standards 	<ul style="list-style-type: none"> Cost of maintaining eco-label On-site inspections by importer 	<ul style="list-style-type: none"> Time/cost needed to enforce contracts

Eco-Labeling Schemes: VOLUNTARY Measures

- Public and Private eco-label schemes exist for textiles/garments. Nearly 20 in Europe alone.



Eco-Label is an EU Label (public) – for T-shirts, bed linens, washable quilts, potentially garments



Okotex is a German-managed label (private) – assesses conformity with eco-management principles; product label relates to textiles, but differentiated based on access to skin; focus on infant and baby clothes



Good Environmental Choice is a Swedish label (private) focused on cloths, home textiles containing at least 95% textile fiber.



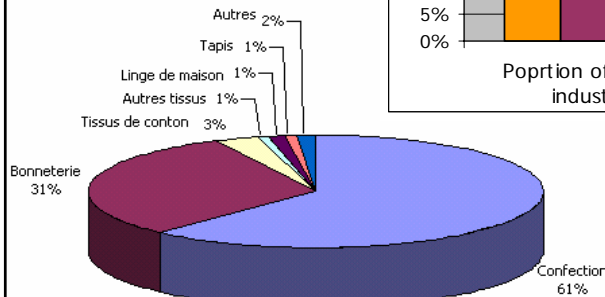
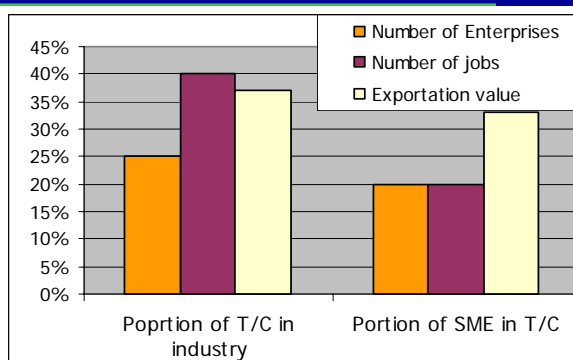
Business for Social Responsibility: Restricted Substances

- **2001: List of restricted substances in finished apparel products**
 - The list was based on consultation with BSR members, industry leaders, public stakeholders and a worldwide review of legislation and regulations concerning the sector.
- **2002: List of restricted substances, their limits and testing methods**
- **2004: List updated and includes:**
 - Primary list of most restricted substances
 - Supplementary list of most likely restricted substances
 - Best practices that identifies substances that are currently not regulated, but which are limited through voluntary restrictions adopted by some companies.

See: www.bsr.org/rsi

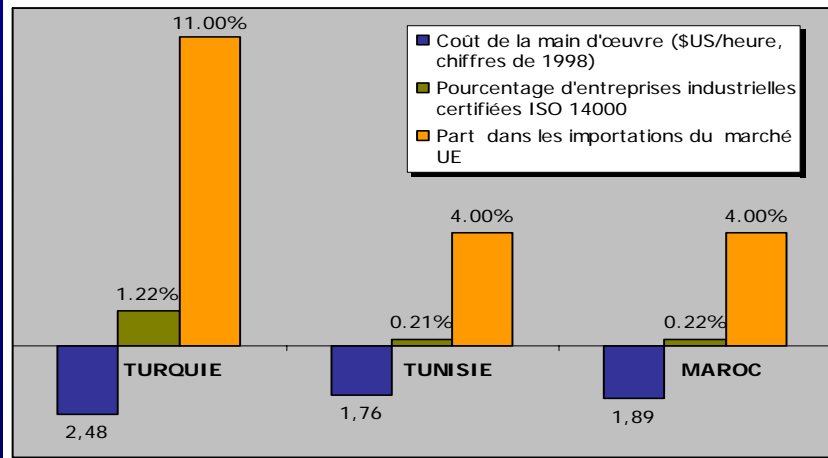
Morocco: Impact of Domestic Wastewater Standards on Textile/Garment Sector SMEs

SMEs in Morocco can have up to 250 employees



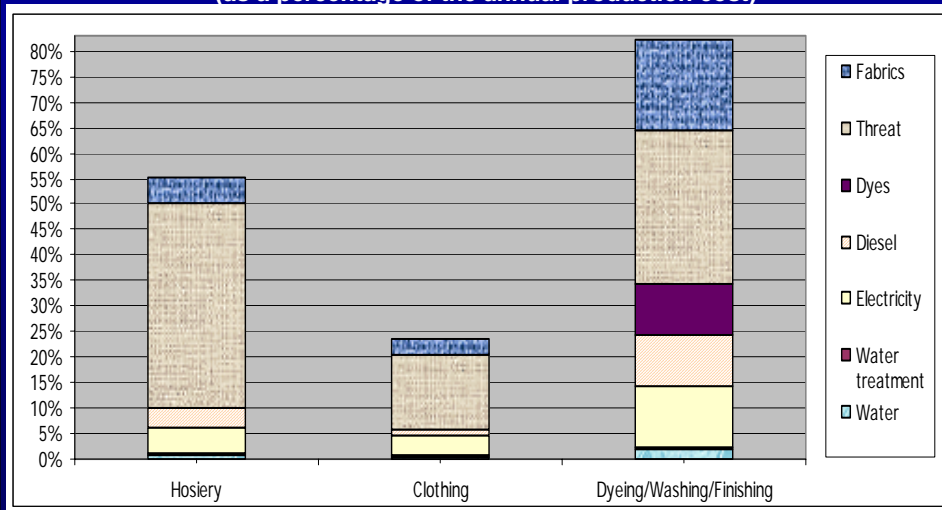
Morocco: Impact of Domestic Wastewater Standards on Textile/Garment Sector SMEs

Comparison between labor costs, ISO 14000 certification and share in European imports for Morocco, Tunisia and Turkey



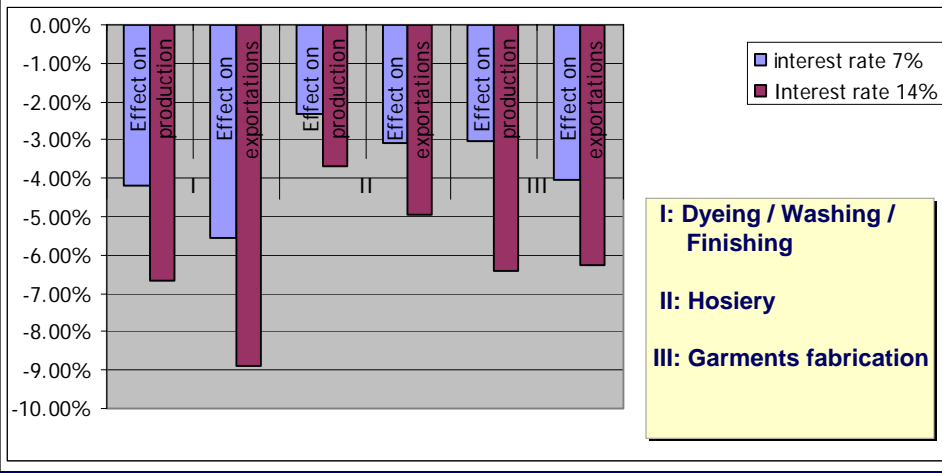
Morocco: Impact of Domestic Wastewater Standards on Textile/Garment Sector SMEs

Principal factors of production by branch (excluding labor)
 (as a percentage of the annual production cost)



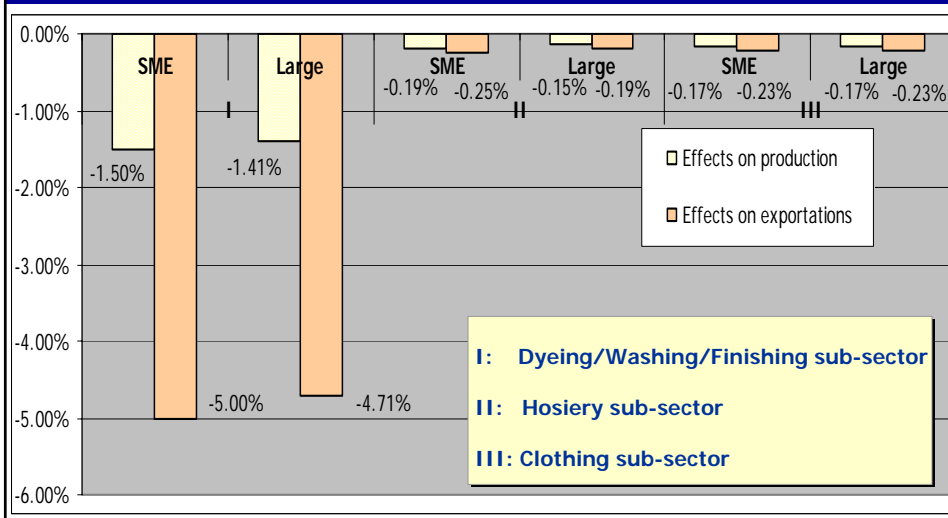
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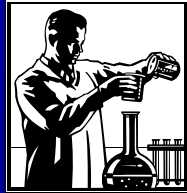
Variation of the effects of the installation of a water treatment station (for BOD, COD and heavy metals) on SME according to the interest rate for an investment of 6 000 000Dh (without efficiency gains)



Morocco: Impact of Domestic Wastewater Standards of EU Azo Dye Regulations / SMEs

Effects on SMEs v/s Large Firms in Different Sub-Sectors





PART IV:

Environmental, Health and Safety Measures Impacting the Pharmaceutical Industry

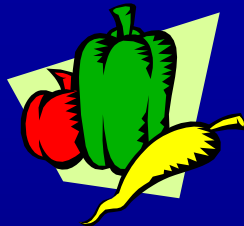


Pharmaceuticals Industry in the MENA Region: Most Troublesome Environmental Requirements

	Product Standards	Process & Production Methods	Conformity Assessment	Dispute Resolution
Regulatory Measures	<ul style="list-style-type: none"> • Expiry date • Drug stability • Banned use of Bovine-derived materials • Labeling • Packaging 	<ul style="list-style-type: none"> • Good Management Practices (GMP) • Licensing • Patents (IPR) 	<ul style="list-style-type: none"> • High cost of product testing prior to export • Limited number of certified labs and technical equipment in region, plus costly 	<ul style="list-style-type: none"> • Communication links between firms & trade ministries poor • Politicization of inter-government dispute settlement
Voluntary Measures	<ul style="list-style-type: none"> • Eco-labeling 	<ul style="list-style-type: none"> • Good Lab Practices (GLP) – [required only by Qatar] 	<ul style="list-style-type: none"> • On-site inspections by importer • Product testing by importer 	<ul style="list-style-type: none"> • Time/cost needed to enforce contracts

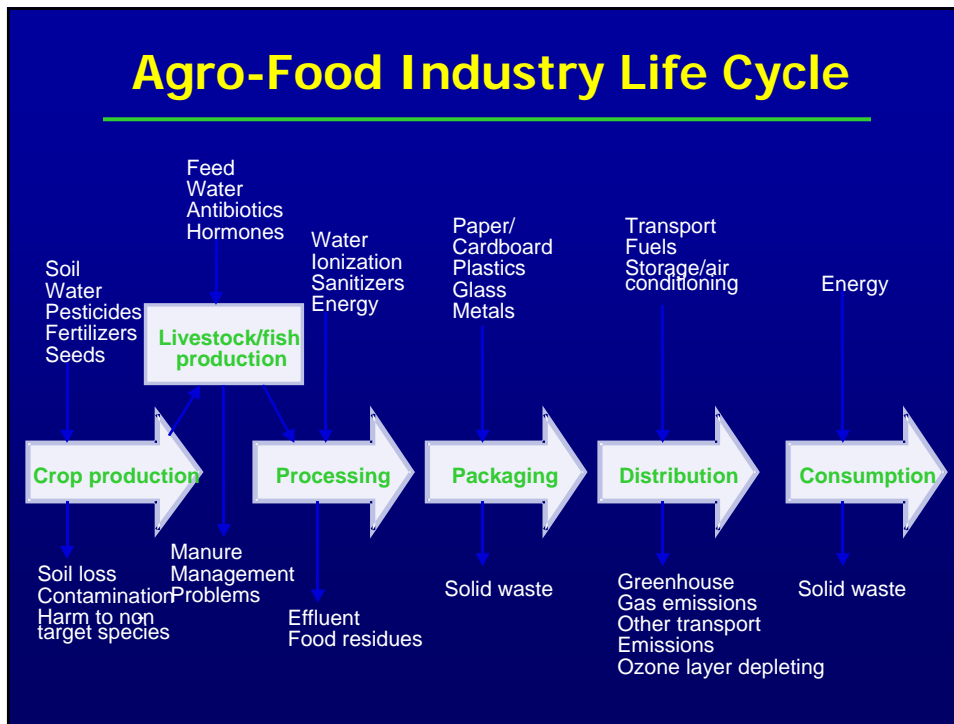
Pharmaceuticals Industry: Examples from the MENA Region

- **Process Requirement and Conformity Assessment - Good Manufacturing Practices/Good Laboratory Practices:** GMP required by ~all Arab countries; GLP by Qatar – thus Qatar doesn't accept certification by countries in region, because none accredited to issued GLP certification. Hazardous waste disposal issue.
- **Syria – Licensing, IPR and Protecting Human Health**
 - Ministry of Health allows local production of imported drugs to provide cheaper alternatives to local population; matched with import ban.
- **Jordan v/s Lebanon: Registering new drugs:**
 - Could take 2 years in Jordan, and only 3 months in Lebanon.
- **Saudi Arabia – Product requirements**
 - No bovine-derived materials, coloring of medicines based on WHO standards, no alcohol in medicine (= cultural requirement)
- **Egypt – Non-discrimination principle challenge**
 - To export drug to Egypt, must be FDA approved, even though many drugs produced/sold in Egypt not FDA approved.



PART V: SPS Measures related to Environment, Health and Safety Impacting the Agro- Food Sector

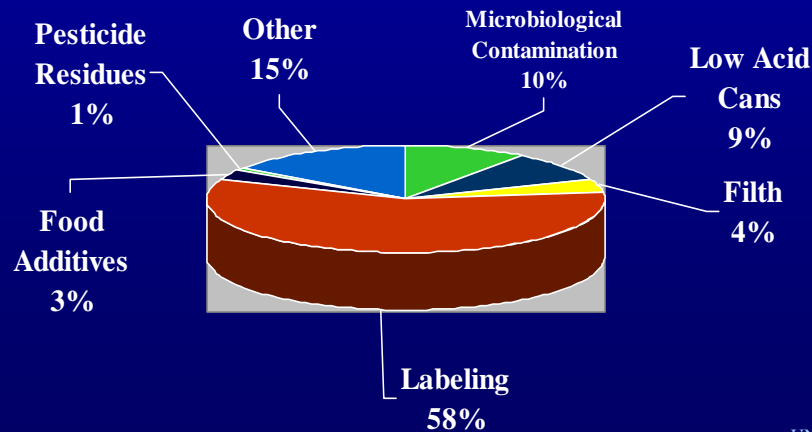




Environmental Measures most affecting the Agro-Food Industry in ESCWA Countries

	Product Standards	Process & Production Methods	Conformity Assessment	Dispute Resolution
Regulatory Measures	<ul style="list-style-type: none"> Expiry date Additives Labeling Packaging Pesticides residues 	<ul style="list-style-type: none"> Sterilization Sanitation GMO certification 	<ul style="list-style-type: none"> High cost of product testing Limited number of accredited labs in region 	<ul style="list-style-type: none"> Communication links between firms & trade ministries poor Politicization of inter-government dispute settlement
Voluntary Measures	<ul style="list-style-type: none"> Eco-labeling Packaging (recycled content) 	<ul style="list-style-type: none"> ISO HACCP Sanitation Eco-labeling 	<ul style="list-style-type: none"> Inspection by importer Cost of testing Cost of maintaining conformity with eco-label 	<ul style="list-style-type: none"> Ag. exporter usually bears cost of delayed shipments & storage Time/cost needed to enforce contracts

Reasons for USFDA Detentions from Egypt, Jordan, Lebanon & Syria (Jan-June 2001)



UN-ESCWA

EC Food Safety Legislation

- On 1 January 2005, the **General Food Law** came into force, which establishes the general principles and requirements of European food law.
 - Regulation (EC) No 178/2002 of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety
- Law establishes **European Food Safety Authority (EFSA)**
- Law references the **precautionary principle** as a means to ensure the health of European citizens; but recognizes that such a policy can give rise to trade barriers & thus recognizes the need to ensure uniform application of the principle throughout the EC.
- Law also articulates EC commitment to the use of **science-based risk assessment** and management of foodstuff, in line with WTO principles
- Highlights importance of consumer protection & food safety throughout EU: **Rapid Alert System for Food & Feed (RASFF)**

Notification: EU Rapid Alert System

Country of Origin	Date	Notified by	Product	Reason for notification
Egypt	26/01/2005	Italy	Coriander seeds	Too high count of Enterobacteriaceae in coriander seeds
Egypt	02/03/2005	Greece	Groundnut kernels	Aflatoxins in groundnut kernels
Egypt	26/01/2005	Italy	Groundnuts in shell	Aflatoxins in groundnuts in shell
Egypt	14/01/2005	Italy	Peanuts	Aflatoxins in peanuts
Lebanon	11/03/2005	Finland	Sesame paste	Salmonella Montevideo in sesame paste
Lebanon	24/01/2005	UK	Sojok spices	Unauthorised colour Sudan 4 in sojok spices
Lebanon	12/01/2005	Sweden	Sweet Curry	Colour Sudan 1 in sweet curry
Syria	11/03/2005	Cyprus	Peanuts	Aflatoxins in peanuts
Tunisia	26/01/2005	Italy	Spices & sweet peppers	Bacillus cereus in spices & sweet peppers

Source: <http://europa.eu.int/comm/food/food/rapidalert/reports/>

Eco-Labeling: Organic Production

- Organic products constitute a niche market that is growing in OECD countries.
- Organic production is based on voluntary environmental standards formulated by Governments and International NGOs
- Definition of “Organic” and its various levels differs between US, EC and other public and private led labeling schemes
 - Misleads and confuses consumers
 - Raises debate regarding Labeling requirements and standards
- Production of Organic Products is difficult in the absence of the locally available organic inputs, accreditation infrastructure & certifying institutions to support industry
 - Accredited organization needed to certify organic inputs as well as outputs.



Eco-Labeling: Conformity Assessment

- International Federation of Organic Agriculture Movements (IFOAM) Organic Guarantee System unites the organic world through a common system of standards, verification and market identity, see:
 - *IFOAM Accreditation Criteria for Bodies Certifying Organic Production and Processing (IAC)*
 - *IFOAM Basic Standards for Organic Production & Processing (IBS)*
- Sets baseline standards for organic labeling regimes throughout the world so that consumers are aware of the minimum requirements that a product must satisfy in order to be considered organic.
- Despite understanding that “organic” standards constitute PPMs and thus should remain voluntary, fear exists that eco-labeling may become so pervasive that it will effectively become technical barriers to trade and another obstacle to accessing developed country markets.



PART VI New EC Regulations affecting the Electronics Industry

New EU Directive on the Electronics Industry (1)

- Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 restricts the use of certain hazardous substances in electronic equipment and states that of 1 July 2006
 - Means that these items sold in the EU cannot contain **lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE)**.
 - ANNEX to Directive EXEMPTS lead which is commonly used for soldering. Without Exception, would have been problematic for electronics manufacturing, particularly since alternatives for soldering, such as silver or antimony, would need to be used. However, these two metals are expensive and can leach into water sources and cause adverse environmental and health effects, which may be worse than that caused by lead.
 - **Would also introduce the question whether banning lead in electrical equipment is the most effective (and least trade-restricting) option.**

New EU Directive on the Electronics Industry (2)

- Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment (WEEE), establishes a framework for regulating the **recycling of waste electrical and electronic equipment (WEEE)** within the EU
 - Sets various targets, including a 13 August 2005 deadline for Member States to establish the financial mechanism that ensure that the collection, treatment, recovery and environmentally sound disposal of WEEE (other than those purchased by private households) be provided by producers.
 - **This is based on the polluter-pays principle and would require manufacturers of WEEE (including those abroad) to be responsible for its disposal.** Manufacturers will need to demonstrate compliance with these two regulations if they are to access the European market.
 - Note that mechanisms will also be put into place to ensure that private households also recycle electronic items.
 - **Questionable whether this is an acceptable PPM measure.**

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Thank you.



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