



WORLD TRADE  
ORGANIZATION



# SPS COMMITTEE THEMATIC SESSION ON TRADE FACILITATIVE APPROACHES TO PESTICIDE MRLS, INCLUDING SUBSTANCES NOT APPROVED FOR USE IN AN IMPORT MARKET





# Registrant Experiences MRL Enforcement: Trade impact & Food for Thought



2022



# Outline

**Trade Impact on Food Standards**

**MRL Compliance Policies**

**Trade Facilitating Solutions**

**Food for Thought**



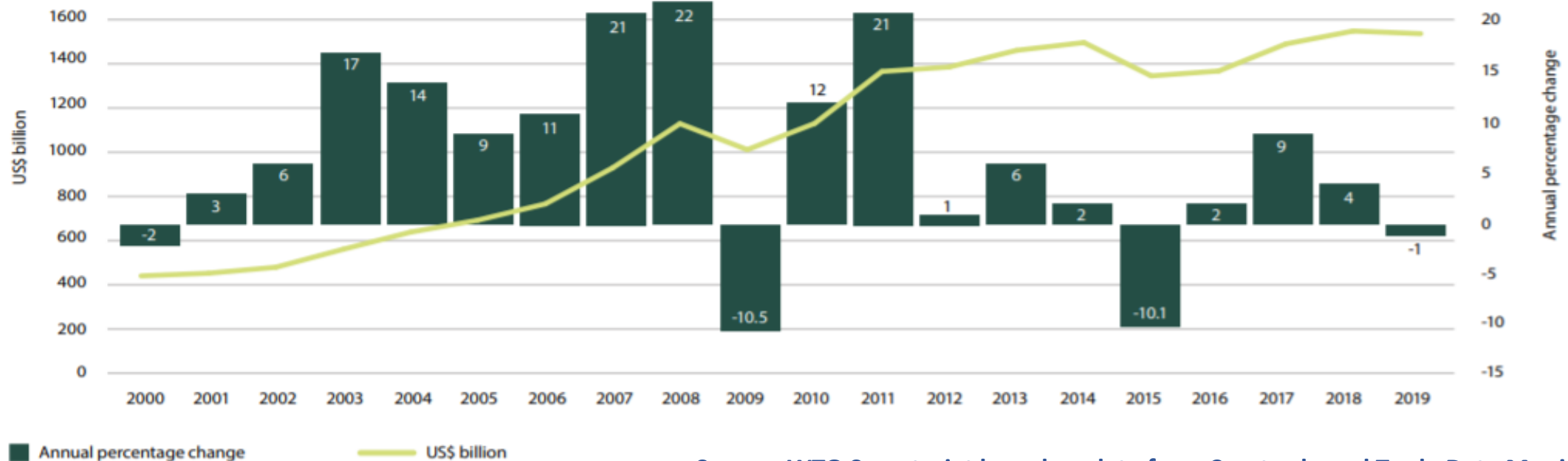
# Trade Impact on Food Standards

World Trade Statistical Review 2020



World trade in food products showed export increased on average by 7 per cent per year between 2000 and 2019

Chart 4.4  
World exports of food, 2000 – 19  
(US\$ billion and annual percentage change)



Source: WTO Secretariat based on data from Comtrade and Trade Data Monitor.

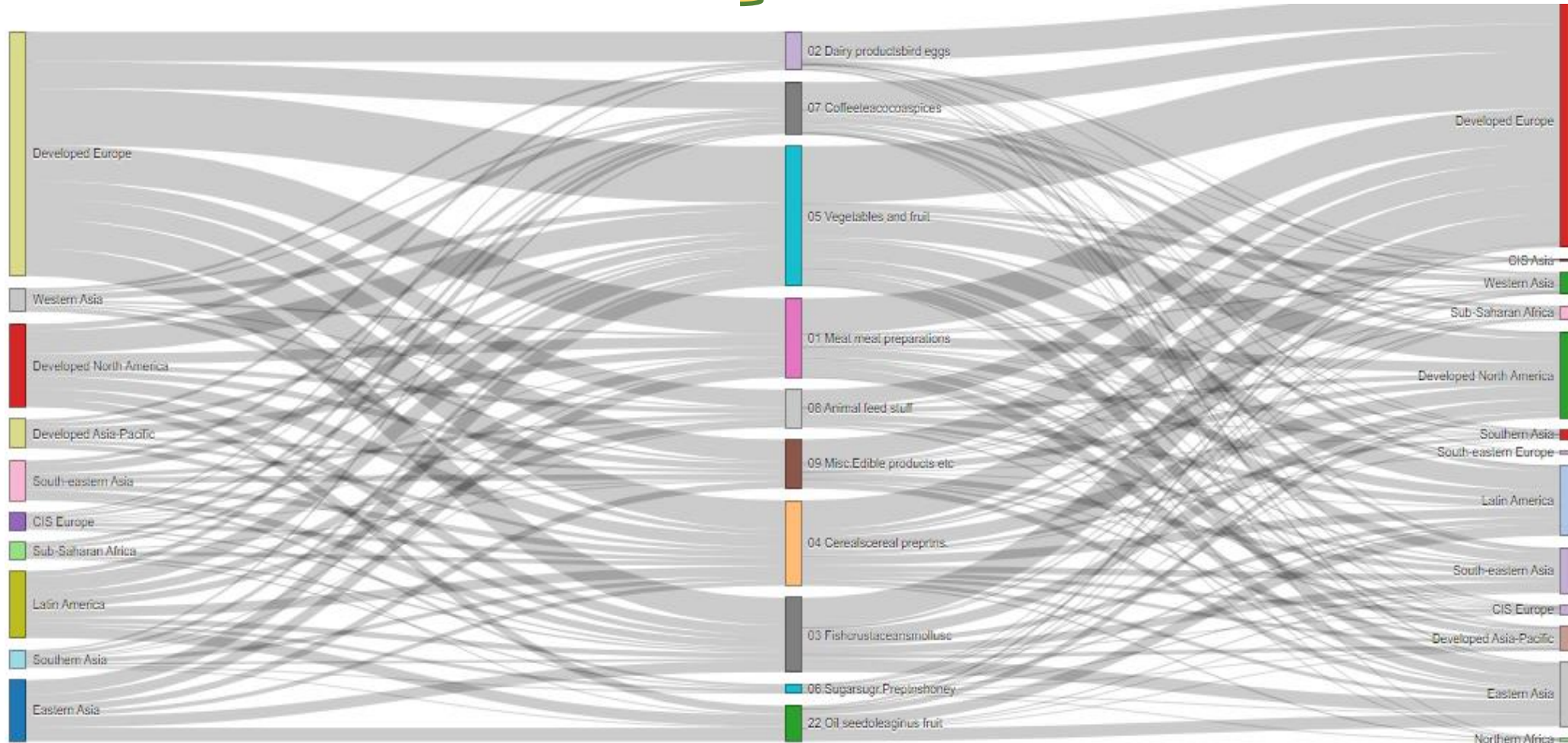
# Food Security, Safety, Trade Standards



- Food Security – INCREASE
- Food Trade – INCREASE



**MORE MRLs are NEEDED !**



**UN-COMTRADE 2015-2020 Agricultural Trade Flow (38 commodities, 195 countries)**



# Food Trade Standards

**Primary Standards:  
MRL & IT  
(Regulatory)**

**Maximum Residue Limits**

**Import tolerances**

- ~ 110 countries publish MRLs
  - ~ 14 countries set MRLs based on local studies.
  - ~ 70 countries adopt Codex MRLs.
- ~ MRL are available for 900+ pesticides, on 700+ crop commodities

**Secondary  
Restrictions  
(Private)**



**Certifications  
(Private)**



# Monitoring Methods

## 1. Official Methods – multi-residues & validated

- US [PAM I](#) & [PAM II](#), EU [DG-SANCO D-19](#), Codex [Guideline](#)
- Flexibility for sanctions 40-50% over default monitoring level (0.01ppm)
- ✓ [APEC Compendium](#) for MRL enforcement



## 2. Private Monitoring –multi-residues & validated (GC/LC- MS/MS)

## 3. Production Compliance Monitoring –variety of methods (QuEChERS), with/without validation



# Global Economic Impact of Missing and Low Pesticide Maximum Residue Levels



## **MRL Volume 1 – July 2020**

- Chapter 5: Costs & Effects of low & missing MRL
- Chapter 6: Effects of Trade policies on MRL in Economic Literature

## **MRL Volume 2 – April 2021**

- Chapter 3: Economic Effects of MRLs (gravitational models)
- Chapter 4: MRL Policy Effects on agricultural production, and income of small farmers



<https://www.usitc.gov/publications/332/pub5160.pdf>



# Global Effects of MRL Reductions

## Direct trade effects

MRL Estimates	Heterogeneity	Stringency
Tropical fruit	Trade decreasing	Import Increasing
Temperate fruit	Trade decreasing	Import decreasing
Beans and peas	Trade decreasing	Import decreasing

## Global effects (direct + indirect)

- **EU countries** experience the largest effects of changes to EU MRLs
- **Countries with close trading relationships** or that follow EU MRLs have some significant impacts
- **Most other countries** face limited impacts
  - Countries shift trade to/from other sources or destinations
- MRLs have compounding and offsetting effects



# MRL Effects - Banana Producers: Costa Rica

- Left with few pesticides, lots of pests, need 5+ years for new registrations!

**Table 4.3** Estimated effects of missing and low EU MRLs on the Siquirres Banana Farm's income statement

Indicator	Baseline	Scenario 1	Scenario 2
<b>Farm size (ha)</b>	900	900	900
<b>Yield (MT/ha)</b>	49.2	21.0	46.1
<b>Production (mt)</b>	44,280	18,863	41,490
<b>Shipments (mt)</b>	44,280	18,863	41,490
<b>Producer price (\$/mt)</b>	453.00	453.00	453.00
<b>Unit costs (\$/mt)</b>			
Variable costs	228	438	252
Fixed costs	73	171	78
Total costs	301	609	330
<b>Revenue (\$)</b>	20,058,840	8,545,066	18,795,133
<b>Costs (\$)</b>			
Variable costs	10,095,712	8,267,301	10,449,062
Fixed costs	3,228,038	3,228,038	3,228,038
Total costs	13,323,749	11,495,338	13,677,099
<b>Operating income (\$)</b>	6,735,091	-2,950,272	5,118,034
<b>Operating income margin (percent)</b>	33.6	-34.5	27.2

Source: USITC estimates; Government of Costa Rica, MAG, SEPSA, "Boletín Estadístico Agropecuario" (bulletin of agricultural statistics), April 2020, 30; FAOSTAT database (accessed August 12, 2020); Government of Costa Rica, MAG, SEPSA, "Modelo de Costos de Producción, Plátano" (production cost model, bananas), 2019; volume 1, 219–30. For more detail on the sources for these data, see appendix G.

# MRL Solutions



## MRL Toolbox

There is no general solution, each country needs different approach(s)



**Transitional Plan**

### OECD Mutual Acceptance of DATA (MAD)

- IT based on MRL in export country (APEC IT 2016)
- No data review
- Risk based on importing country diets

**Catch-up Plan**

### Positive List System

- For “missing” MRLs
- Highest MRL
- Risk for local, or global diets
- Distinct residue definition treated as case-by-case

**ONE-MRL Aspiration**

### Enhanced Codex

- 1<sup>st</sup> national review triggers
- Codex global risk & MRL
- All members to adopt MRL, or
- Suggest increase, repeat the process

**UNIQUE GLOBAL SYSTEM FOR TRADE STANDARDS**

**FREE TRADE**

# Opportunities for Harmonization

## IMPORT TOLERANCES

- Exponential increase in demand, current duplicated reviews in so many countries are not sustainable
- Recognition of production country MRL as IT in importing country (OECD)
  - Based on acceptable risk to consumers in importing country (APEC)
- Import Tolerance regulations needed in key countries (China, Brazil)
- MRL need 5 years transition to find substitutes before drop to default

## MISSING MRLs increased productivity

- Tolerance Exemption implementation in more countries
- MRL by category in more countries
  - inadvertent uses (rotated crops, drift, etc)
  - MRL food-handling uses
- ONE MRL globally (enhanced Codex)



**Food Security. Freedom to Trade. Food Safety.**

# THE ONE MRL - CONCLUSION

**1.** More MRL are needed than what can be set  
Supporting 300+ free trade agreements (and counting)

**2.** Harmonization is not possible for so many  
type of food standards

**3.** Food standards need to be global  
Codex needs enhancement to be adopted by all



*Many Thanks for the Attention!*

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