

## MERCURY-ADDED SKIN LIGHTENERS WIDELY AVAILABLE DESPITE CONVENTION OBLIGATIONS

Despite substantial health risks, mercury compounds are often added to skin lightening products to lighten the skin, making them illegal under national laws and the Minamata Convention. These violations are facilitated by the lack of e-commerce regulatory oversight, resulting in an explosion of counterfeit products offered in local markets and by internet platforms globally. Antigua & Barbuda and the ZMWG will be presenting new evidence on the magnitude of the problem and the legal/implementation reforms necessary to prevent illegal skin lighteners from entering the marketplace.

### LIST OF SPEAKERS

- Charline Cheuvar, EEB/ZMWG
- Michael Bender, MPP/ZMWG
- Dr. Linroy Christian, Antigua and Barbuda
- David Lennett, NRDC



**THURSDAY, 10 MARCH 2022**

**15H30-16H30 CET**

**zero**   
mercury working group

— Department of —  
**Analytical Services**  
• Quality Science for Applied Solutions •

**Dr. Linroy Christian | Director**

# Mercury-added Skin Lighteners



## The Experience of Antigua & Barbuda

Linroy Christian  
Director of Analytical Services  
Focal Point to the Minamata Convention on Mercury

# Article 4 Obligations

## Paragraph 1



### CFL's

- Reduction through private sector influence

### High Pressure Mercury Vapor Lamps (HPMV)

- Utilities company initiative to reduce Legacy disposal in the Landfill

### Cosmetics

Legislative instrument proposed

### Medical Devices

Policy initiative taken in some sectors

## Paragraph 3

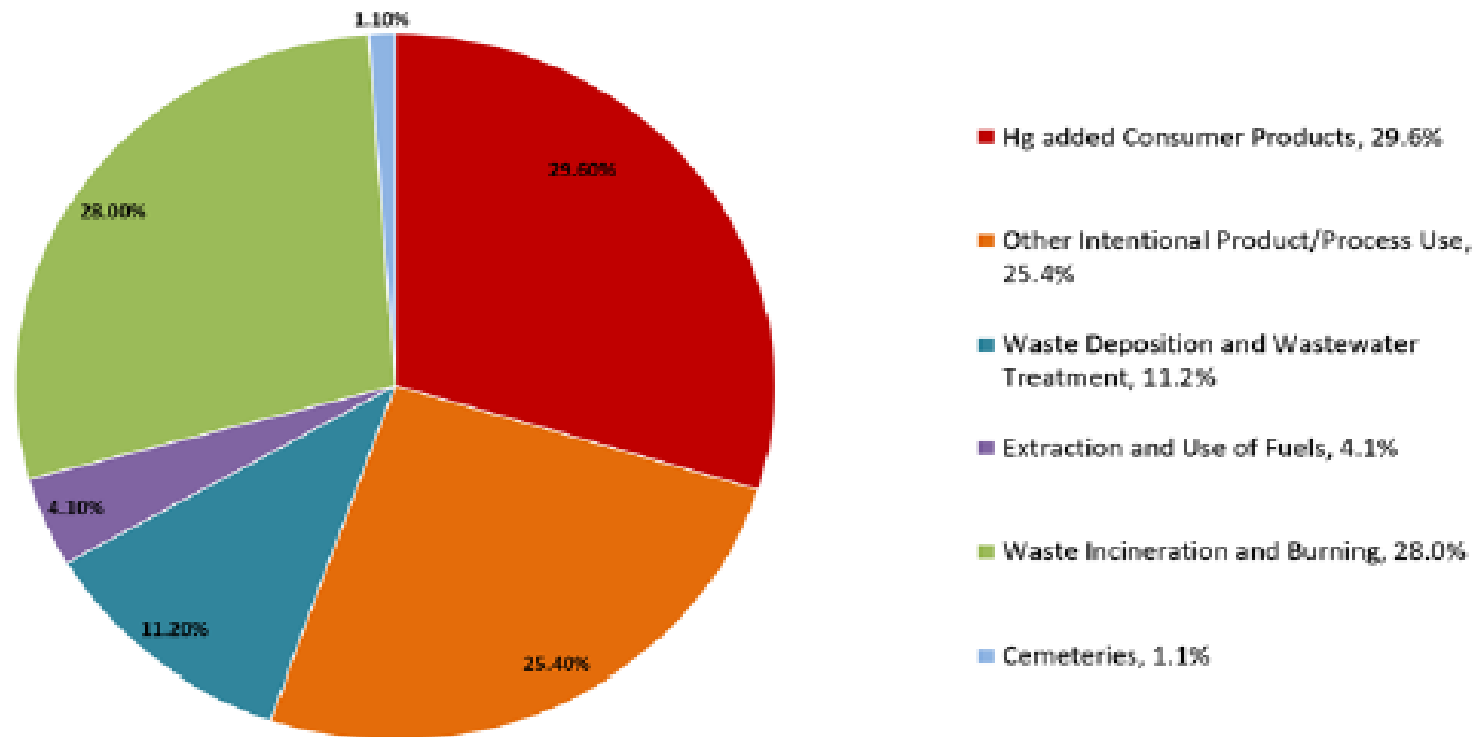


### Dental Amalgam

- Use of dental amalgam widely discontinued due to conscious effort by the private sector
- Policy objective not previously elaborated
- Sector-specific action/promotion required:
  - Insurance sector
  - Dental sector to promote best environmental practices for disposal

# The MIA Process

## ESTIMATED 43.5 Kg Hg RELEASED IN ANTIGUA AND BARBUDA PER YEAR



# MIA Findings Regarding Cosmetics

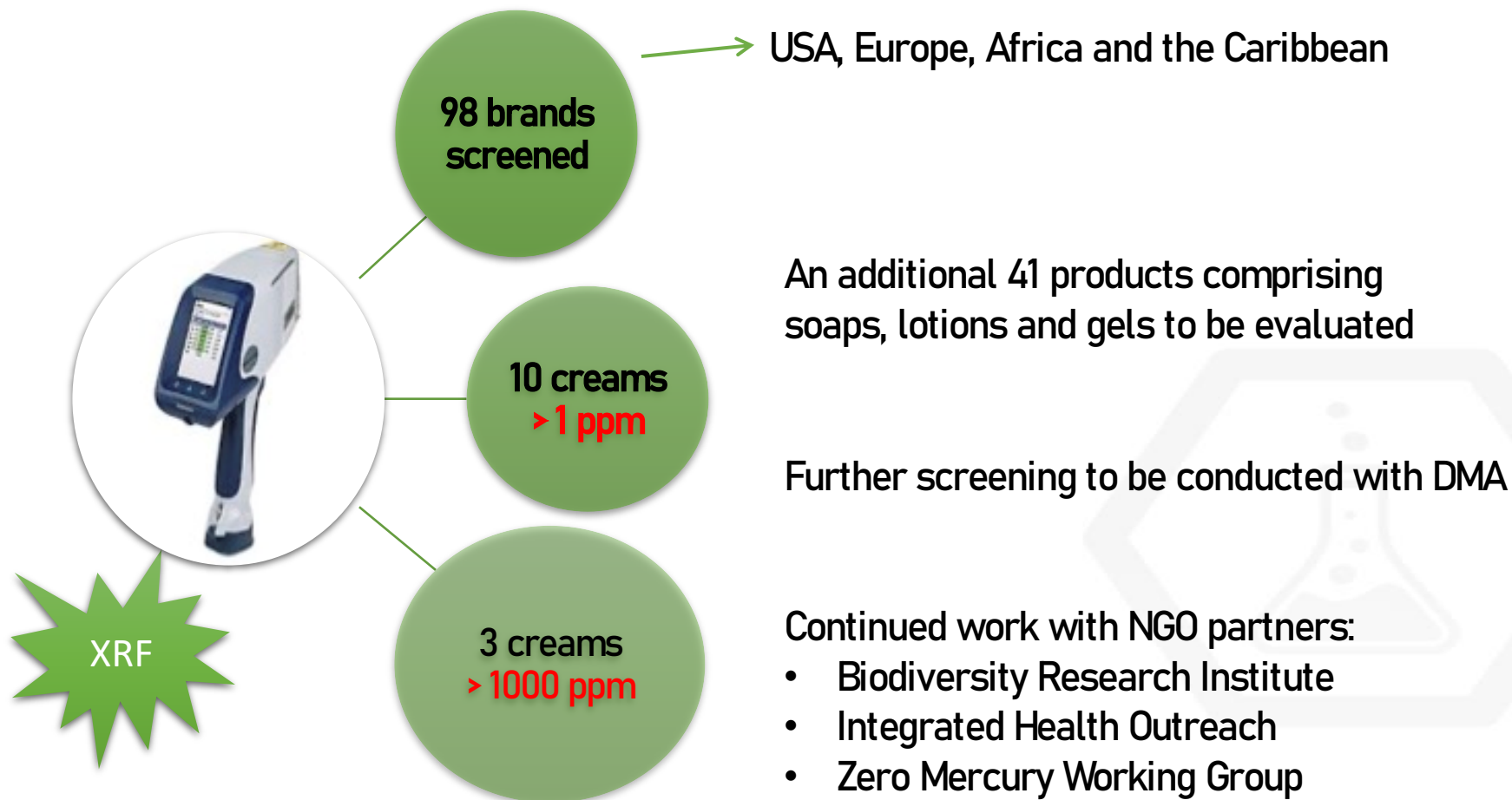
Sixteen (16) brands purchased and analysed

Two (2) purchased within the region contained mercury in excess of **1 ppm**  
**19,000 ppm** mercury was recorded in one case. This cream is still marketed in the region.

The MIA report recommended the imposition of a ban on creams in excess of **1 ppm**

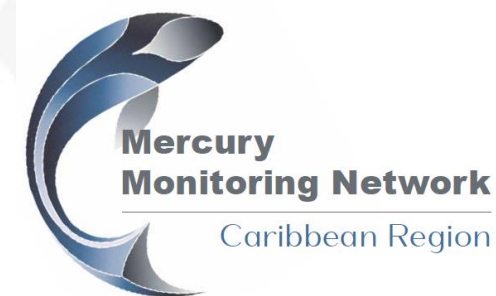
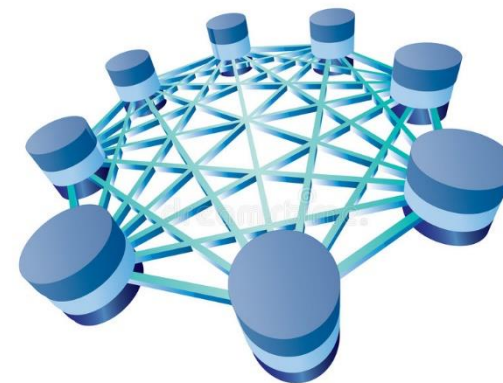
The manufacture of such products are informal and likely pose significant risk

# Additional Work on Cosmetics



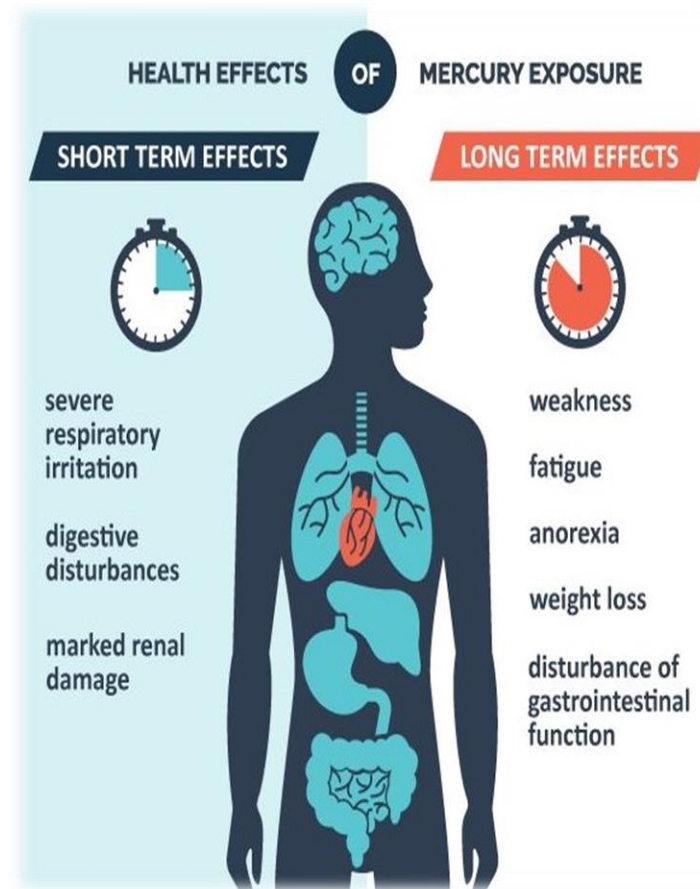
# Building a Database on Cosmetics

- The SIP project for Antigua and Barbuda is expanding cosmetics work:
  - Participating countries have expressed interest in reviewing imported brands for further analysis
  - Samples to be collected across the region
  - Data repository in Antigua and Barbuda as hub of the CRMMN
  - Consideration of online sales in sampling methodology
  - Informal national production to be considered



# Implications of Cosmetics Use

- Human health
  - Directly to the user
  - Secondary effects:
    - Implications for children and infants
- Disposal and environmental health implications
- Social and societal impacts
- Economic and trade implications
  - Regional agreements and the Caribbean Community





# Illegal Trafficking

- Confiscation of consignment of mercury from regional air carrier
  - Crudely transported in used vitamin bottle
  - Transportation with strong oxidizing compounds
- Safety concerns
- Possible use in informal cosmetics sector
- Customs and Border concerns
- Use of mercury in traditional practices
  - Current exemption in Annex A not supported in the Antiguan context



"Secure and Serve"

# The Way Forward

## Improved data collection in the Caribbean region

- Science to action
- Capacity enhancement

## Public and policy level education

## Formal adoption of policy

- Comprehensive policy on MAPs developed for Ministerial endorsement
- Engagement of the private sector
- Identification of mercury-free alternatives

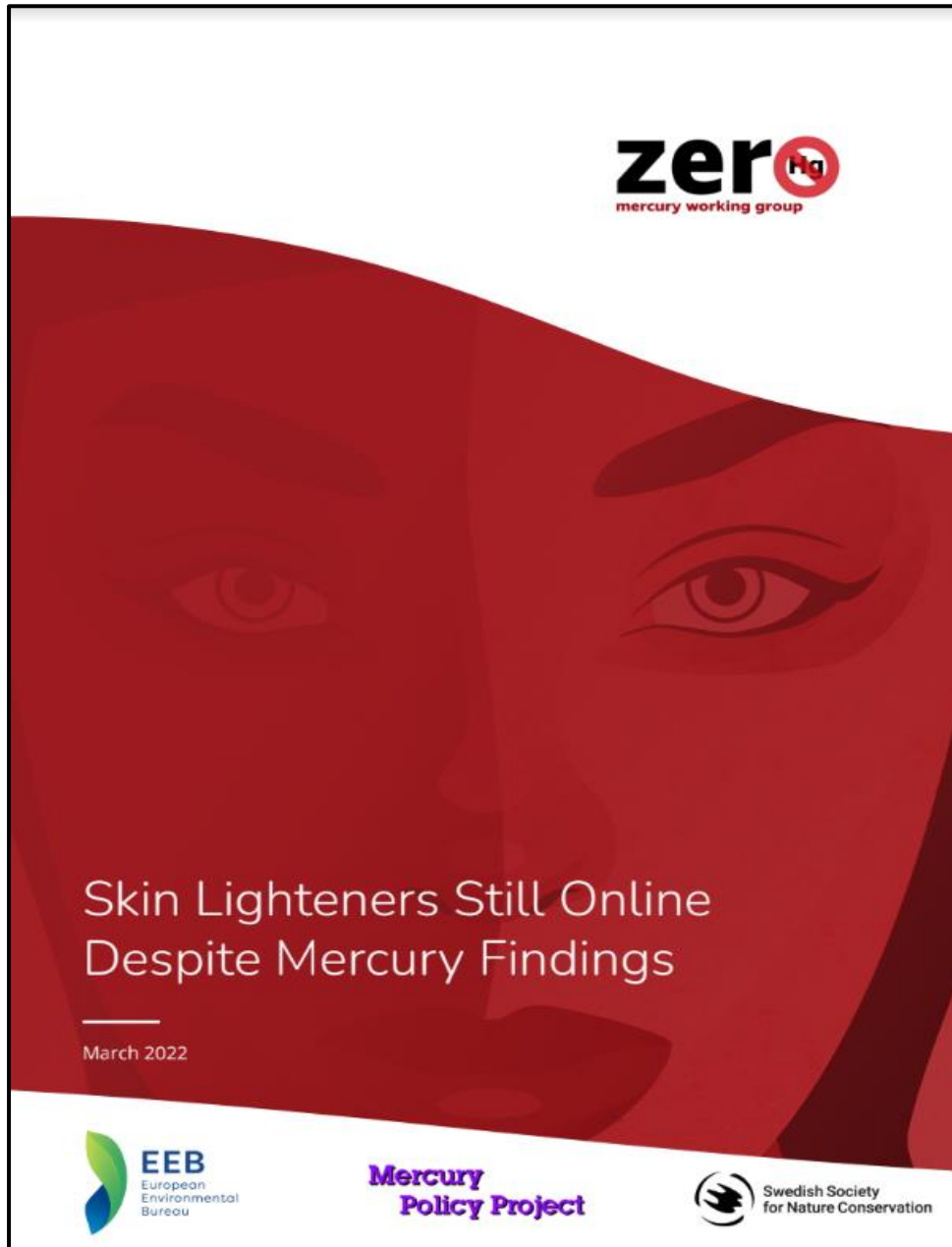
## Continued legislative enactment and review

- **Ban on imports > 1ppm**
- Online sales

## Enhanced regional discourse

- cosmetics manufacture
- Illegal transit of mercury

**Thank you  
for your attention**



# Skin Lighteners Widely Available Despite Convention Obligations

Minamata Convention on Mercury  
Fourth Conference of the Parties

pre-COP4.2 Side Event 10 March 2022

Michael Bender  
ZMWG Co-coordinator





## Zero Mercury Working Group (ZMWG)

- International coalition of 110 public interest, environmental and health non-governmental organizations from over 55 countries
- Formed in 2005 and co-coordinated by the European Environmental Bureau and the Mercury Policy Project
- Supports the Minamata Convention with the goal of reducing mercury in the global environment to a minimum.

## NGO Partners:

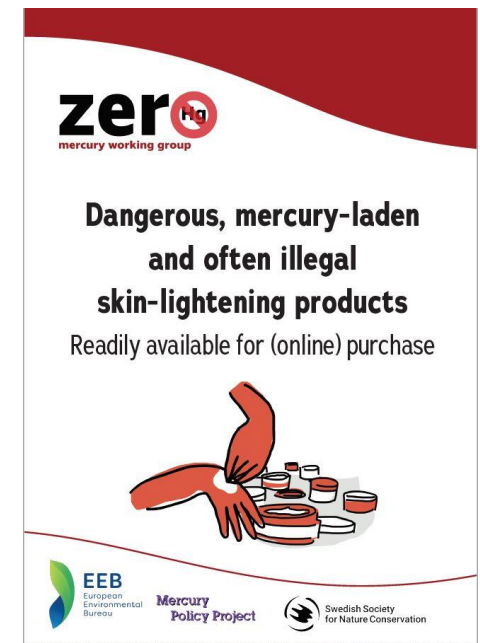


- AFRICA- Bio Vision Africa, **Uganda**; Center for Environment Justice and Development (CEJAD), **Kenya**; Centre Africain pour la Santé Environnementale (CASE), **Cote d'Ivoire**; groundWork (gW), **South Africa**; Sustainable Research and Action for Environmental Development (SRADev), **Nigeria**
- AMERICAS- Casa Cem, **Mexico**; Sierra Club & Mercury Policy Project (MPP), **United States**; Integrated Health Outreach (IHO), **Antigua and Barbuda**; Toxisphera Environmental Health Association (TEHA), **Brazil**
- ASIA- BAN Toxics, **the Philippines**; Center for Public Health and Environment (CEPHED), **Nepal**; Earth, **Thailand**; Environmental and Social Development Organization (ESDO), **Bangladesh**; NEXUS3Foundation, **Indonesia**; Toxics Link, **India**
- MIDDLE EAST- Environment Friends Society, **Bahrain**
- EUROPE- European Environmental Bureau (EEB), **Belgium**



# ZMWG Investigations of Mercury Added Skin Lightening Products Sold Globally

- 2017- 2022, 3 separate ZMWG investigations, confirming continued worldwide availability of illegal products
- Main concern: health risks and illegality of Hg products
- Starting in 2021, Minamata Convention bans manufacture and trade of cosmetics containing over 1 ppm mercury
- Our 2022 report echoes recommendations made in our 2018 & 2019 testing reports & 2019 enforcement report; also includes recommendations for legal online reforms
- Recommendations covered in the next presentation.



# Health Risks of Mercury Added Skin Lightening Products

- Mercury compounds are added to lighten the skin by suppressing the production of melanin
- Symptoms associated with exposure are not unique to mercury, so difficult to identify or diagnose until serious health effects occur
- The regular use of skin lighteners containing mercury can lead to rashes, skin discoloration and blotching
- Long-term exposure may damage the eyes, lungs, kidneys, digestive, immune and nervous systems
- Can also expose others, through skin-to-skin contact, and may even require home decontamination



# Widespread Use of Skin Lighteners

- Symbol of societies grappling with internalized racism and colorism.
- In some populations, > 50% of individuals use regularly.
- One analysis estimated that 27.7% of individuals *globally* have used skin lighteners at one time or another.
- World Health Organization warns of the health risks of certain skin lighteners—and recommends phase out

PREVENTING DISEASE THROUGH HEALTHY ENVIRONMENTS



## MERCURY IN SKIN LIGHTENING PRODUCTS

Mercury is a common but dangerous ingredient found in skin lightening creams and soaps. Beauty standards promoted by media, advertising and marketing reinforce the bias that lighter skin tone is more desirable than darker skin tone. Skin lightening creams and soaps are commonly used in many African, Asian and Caribbean nations (1, 2). They are also used among dark-skinned populations in Europe and North America (3–5). Mercury sales inhibit the formation of melanin, resulting in a lighter skin tone (6, 7). The Minamata Convention on Mercury establishes a limit of 1 mg/kg (1 ppm) for skin lightening products (8), yet many cosmetic products contain mercury levels higher than that amount to

increase whitening effect (9, 10). Despite having been banned in many countries, mercury-containing products are often easily obtainable (11).

Mercury can be eliminated from skin lightening products by working with health and environmental ministries and raising public awareness about the dangers to health from mercury and other hazardous chemicals in skin lightening products. To stop the manufacture, import and export of skin lightening products in line with the Minamata Convention, regulatory actions by governments are needed – including training of customs agencies – as well as major media and advocacy campaigns.

### Use, production and availability

- Skin lightening products are used worldwide, but their use is particularly widespread in many African, Asian and Caribbean countries (1, 12). Skin lightening products are used by both women and men (13).
- The skin lightening industry is one of the fastest growing beauty industries worldwide and is estimated to be worth US\$ 31.2 billion by 2024 (14). In India, for example, the skin lightening industry (including products with and without mercury) represents 50% of the skincare market and is estimated to be worth US\$ 450–505 million (14).
- Mercury-containing skin lightening products are manufactured in many countries and areas, including Bangladesh (15), China (16, 17), Dominican Republic (18), Hong Kong SAR (China) (15), Jamaica (15), Lebanon (19), Malaysia (15), Mexico (17, 20), Pakistan (21), Philippines (22), Republic of Korea (15), Thailand (23, 24), and the United States of America (25).
- Mercury-containing skin lightening products are available for sale over the internet, promoted online on social media sites, and sold through mobile apps. According to the United States Food and Drug Administration (FDA), these products are often manufactured abroad and sold illegally in the United States, often in small shops and informal markets catering to Latino, Asian, African or Middle Eastern communities. Consumers also purchase them in other countries and bring them back to their country (26). The toxic trade of often illegal mercury-added skin lightening products is a global crisis expected to only worsen with skyrocketing demand, especially in Africa, Asia and the Middle East (15).
- A 2011 survey funded by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety noted that individuals from Brazil, Kyrgyzstan, Mexico and the Russian Federation believe that mercury-containing skin lightening products are easy to obtain (11).

# Online Sales of Mercury Added Skin Lighteners



- Growing market share of e-commerce generally
- Challenges of regulating online sales, especially where the seller is outside the country
- Non-domestic online sellers evade domestic laws that “brick and mortar” stores must comply with
- Violations of health and safety laws facilitated by e-commerce sites not only threaten public health, but also create an uneven playing field

# Prior ZMWG Mercury Test Results (2017-2019)

- In 2017 and 2018, ZMWG purchased 338 skin lighteners from local shops in 22 countries
- 10% were found to contain mercury levels above 1 ppm
- Follow-up study was conducted by ZMWG in 2019, targeting those identified during the 2017-2018 study, as well as others
- Of 166 samples analyzed, purchased from e-platforms and some shops, 56% had mercury levels over 1 ppm

## Amazon pulls skin-lightening products after groups' concerns

Amazon has pulled more than a dozen skin-lightening products with dangerous levels of mercury off its website after Minnesota public-health and environmental activists raised concerns.

Associated Press | NOVEMBER 22, 2019 — 10:09PM



CHRISTINE T. NGUYEN — ASSOCIATED PRESS

In this Wednesday, Nov. 20, 2019 photo, from left, Mary Blitzer, of the Sierra Club, gives a petition of over 23,000 signatures to Amira Adawe of the Beautywell Project as they deliver it to the Amazon Fulfillment Center in Shakopee, Minn. The

# Publicized Test Results Appear Not To Deter Online Platforms

- Most e-commerce platforms are not sufficiently motivated to verify the legality of products sold.
- When platforms were notified of illegal high-mercury products, a common response was that they voluntarily removed products and/or put filters in place as a deterrent.
- Yet it appears that those measures did little to deter online sellers.
- Some products reappeared, as our NGO monitoring showed
- As noted in the 2019 ZMWG report, follow-up investigations showed that same brands found to contain high mercury levels on several sampling occasions in physical shops and via e-commerce platforms.

# Responses From E-commerce Platforms

- In 2019, high mercury products were purchased on seven platforms: Amazon, eBay & Flipkart; from South Africa's Bidorbuy; from Nigeria's Jumia; & from Lazada & Daraz, both part of Alibaba
- Following the 2019 ZMWG study, most of the online platforms were asked to stop selling high mercury products.
- Some did so, while others did not respond or claimed that they had no legal obligations to do. Amazon India, for example, in a 2020 response stated that:  
***“The products offered for sale on the Marketplace are always owned and/or sold by the seller at any point of time (and not by Amazon.)”***
- Reuters review in June 2020 showed continued listings of 19 high-mercury products spanning all seven platforms, including Amazon, Daraz and Ebay.

# 2022 ZMWG Skin Mercury Skin Lightener Test Results



*Product purchased  
from Amazon.com*

- NGOs from 17 countries searched for over 80 suspect products containing over 1 ppm mercury
- Purchased 271 products from more than 40 e-commerce sites accessed from Asia, Europe, Africa & Americas
- 36 brands contained high levels of mercury
- 129 products w/over 1 ppm mercury on 30 sites
- Majority were accessed from multiple countries & continents through a range of online platforms

# Ten Most Often Available Illegal Online Products Found

- Collagen Plus Vit E
- Arché Formula AA Pearl Cream
- Goree Beauty Cream
- Golden Pearl Whitening Beauty Cream
- JiaoBi Whitening set
- Faiza Beauty Cream
- Chandni Whitening Cream
- Goree Day and Night Whitening Cream
- Noor Herbal Beauty Cream
- Due Beauty Cream



# Online Platforms Selling the Most Targeted Products With Mercury Content Over 1 ppm

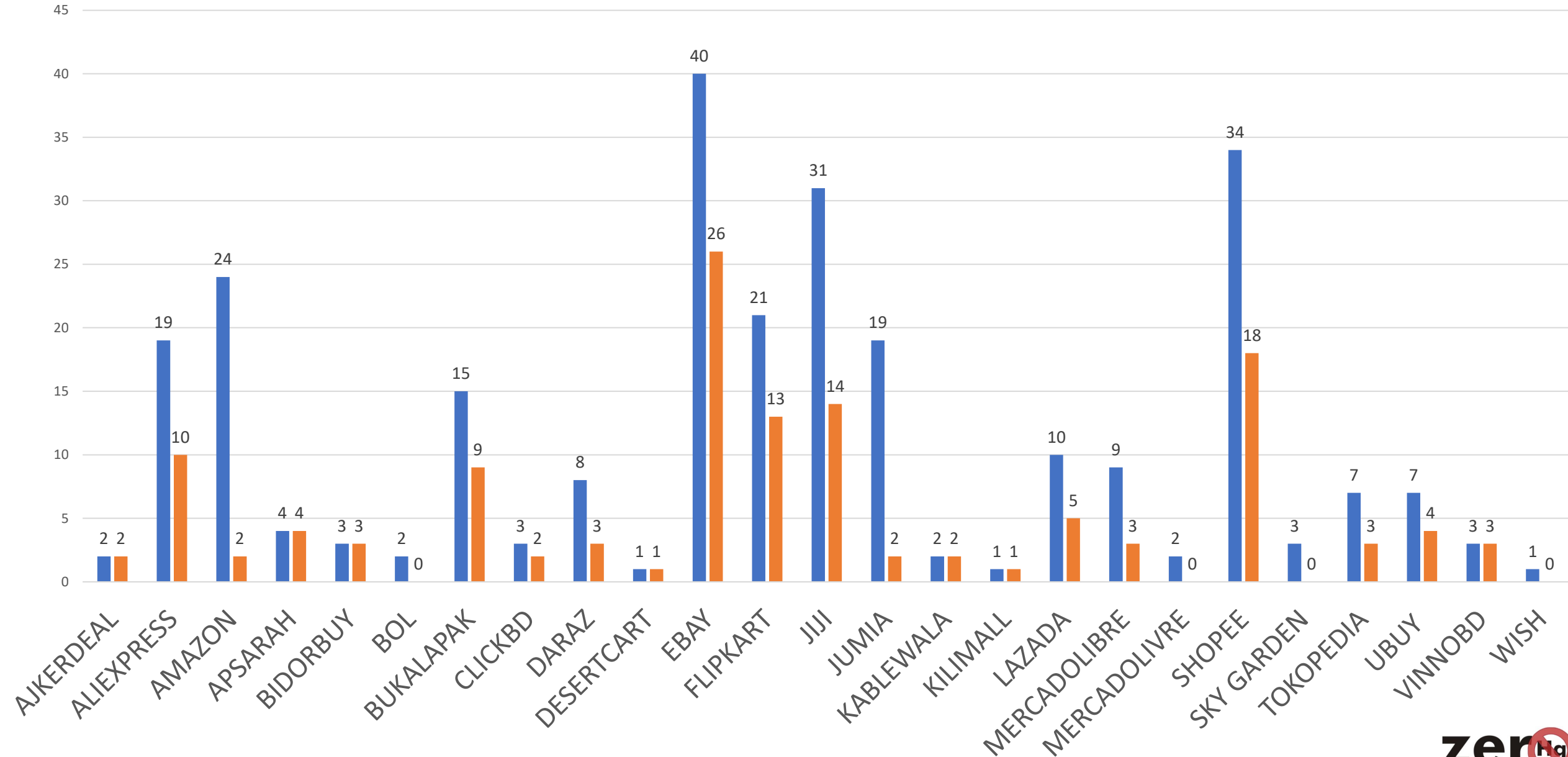
- More than half of the 40 samples purchased on eBay platforms
- Shopee - 18 out of 34 samples
- Jiji – 14 out 31 samples
- Flipkart - 13 out of 21 samples





# High-mercury vs. total SLPs purchased on e-commerce

■ Number of samples purchased    ■ Number of samples tested with mercury levels over 1ppm



# Country of Origin (on Packaging) of Most High-Mercury Products

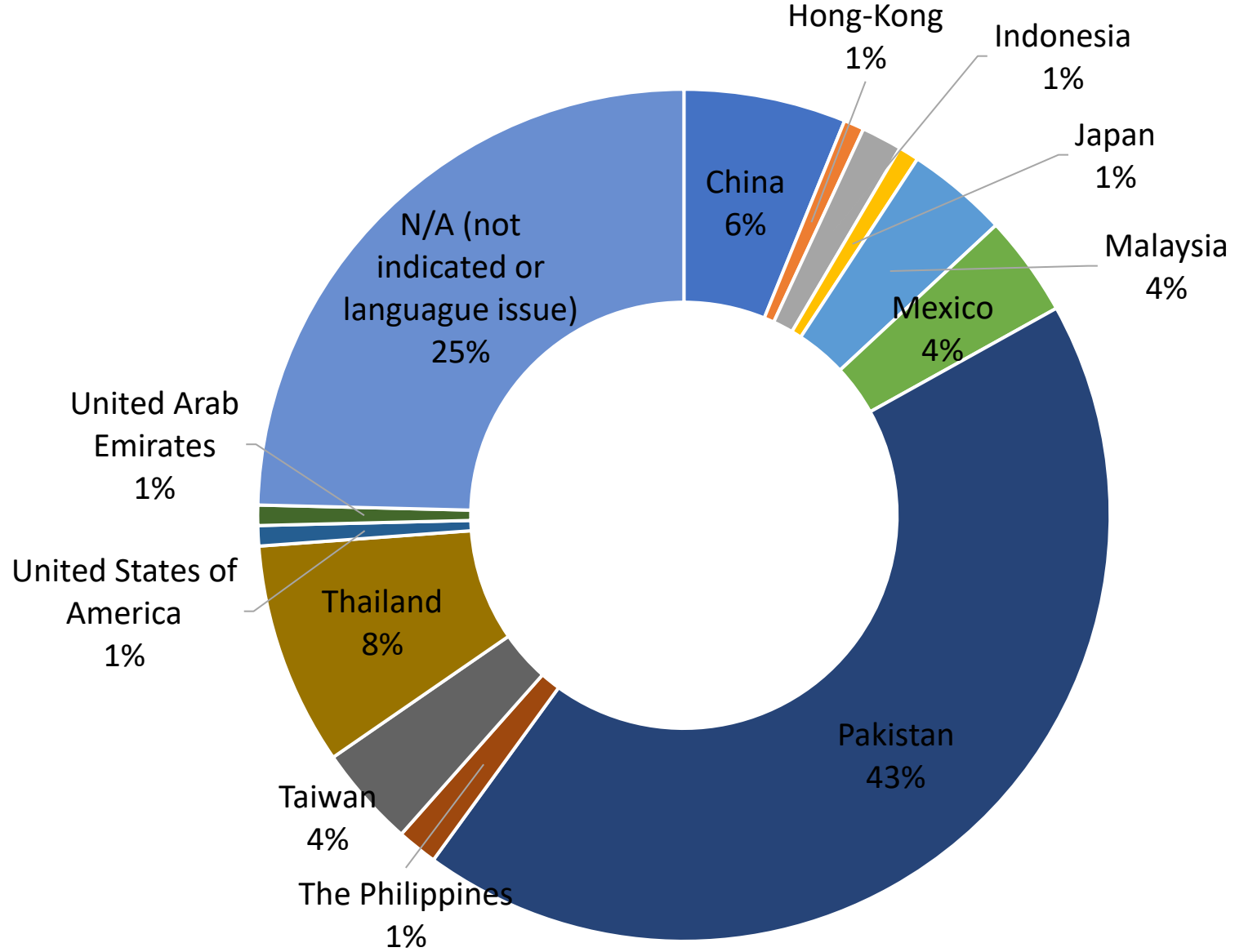
## Annex 4: Public Notice for General Awareness and the Action against Skin Cream Manufacturers, by PSQCA



Public Notice for General Awareness and the Action against Skin Cream Manufacturers, by PSQCA

- Most high-mercury products appear to originate Pakistan, Thailand and China
- In some cases, steps are being taken to curtail illegality- e.g. Public notice action against Skin Cream Manufacturer by Pakistan PSQCA
- However, information is difficult to confirm:
  - Often illegal nature of the business,
  - Challenge of identifying those responsible and their methods, and
  - Role of counterfeit products.

# Origin of SLPs over 1 ppm based on package labelling



# Recommendations to follow in next presentation

## Thank you!



[www.zeromercury.org/mercury-added-skin-lightening-creams-campaign/](http://www.zeromercury.org/mercury-added-skin-lightening-creams-campaign/)



# Preventing the Illegal Production and Trade of Mercury-Added Skin Lightening Creams

David Lennett

Natural Resources Defense Council

March 2022



# Three Routes of Illegal Commerce



**Illegal Domestic  
Production**

Manufacture of illegal  
creams within the country



**Online Sales**

Sellers offering illegal creams  
through online platforms



**Illegal Imports**

Trade of illegal creams across  
international borders

# Tools for Identifying Illegal Production

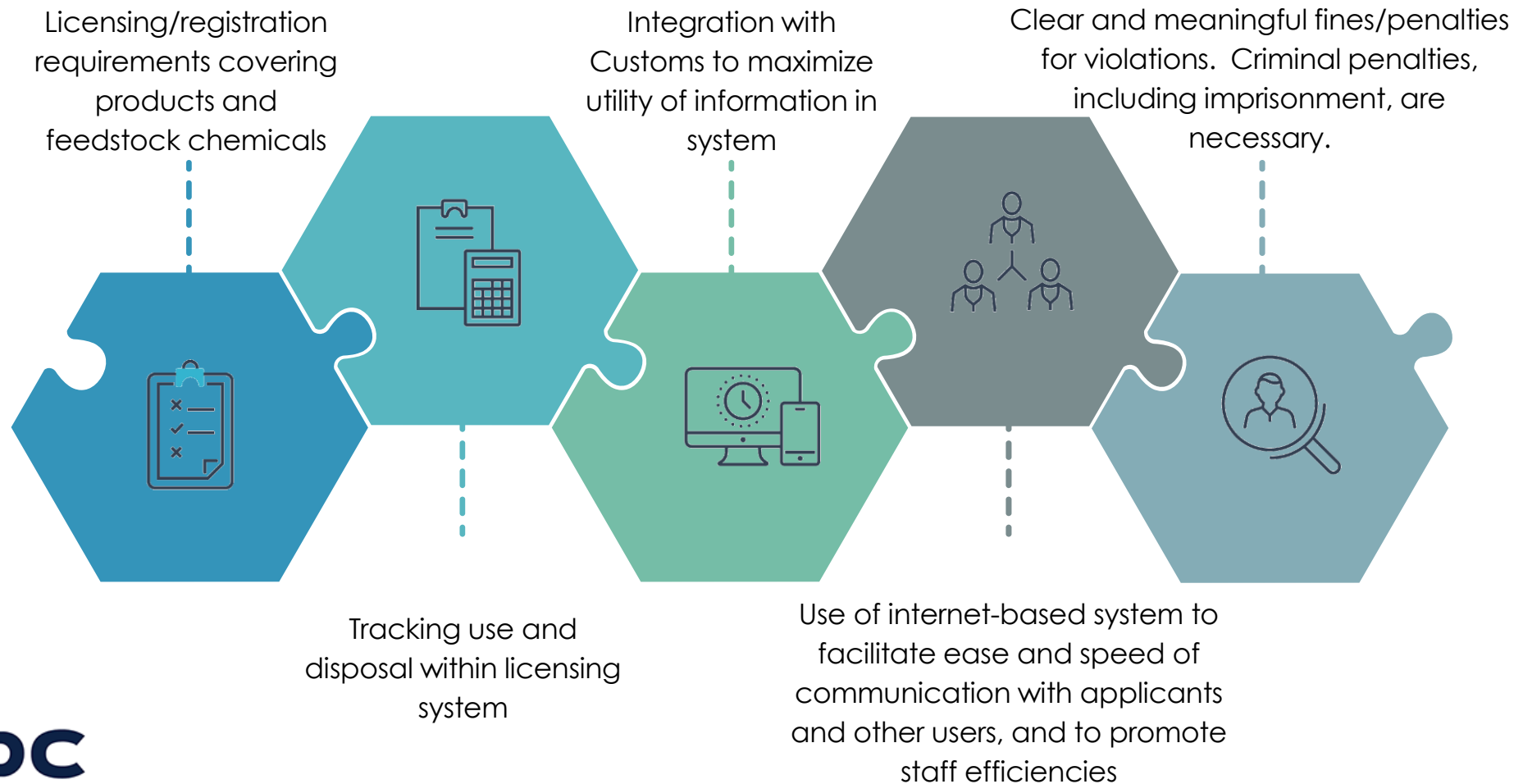


# Seven Pillars for Prevention of Illegal Trade





# Foundation for Enforcement



# Build Frontline Capacity

## Customs officials capacity building



**Training**



**Quick  
reference  
guide/check  
list/manual**



**Detection  
equipment**



**Technical  
support**



**Risk profiling  
(scrutinize  
free trade  
zones)**



**Management  
of seized  
goods**



**Coordination  
with  
licensing/reg  
istration  
system  
administrator**

# Global Information and Coordination Mechanisms

## ○ Enforcement Networks

- Green Customs Initiative
- Interpol
- Pangea

## ○ Minamata Convention

- Information Exchange Platform
- Resources, including preparation of Customs and Enforcement Officers Training Manual
- Support Regional Collaboration
- XRF Group Purchasing and Training
- Effectiveness Evaluation
- Consider Need for Mercury Compound Trade Regulation

# Online Sales of Skin Lightening Creams

## Legal Reforms Needed to Prevent Sales



Illegal and unsafe online product sales  
is a wider problem

- Online platform – **publisher** or **retailer**?
  - Laws enacted decades ago to promote internet commerce treated internet platforms like newspapers, exempting them from liability for illegal/unsafe product sales
  - But internet platforms today are not like newspapers
    - Profit from each product sale
    - Control content of website and terms of sale
    - Often represent foreign sellers which have no physical or financial presence in country
    - Often distribute the product directly

# Change is Coming

## Liability Reform

Recent USA  
court cases



WTO now  
negotiating  
digital  
commerce  
rules



EU legal  
framework  
revisions under  
variety of  
relevant laws

Legitimate  
businesses seek  
relief from sale of  
counterfeit, illegal,  
unsafe competitor  
products

# Online Platform Legal Reform Principles

Platform liability comparable to stores for violations of health and safety laws, injuries to consumers

Require verification of third-party sellers

Require verification that products meet content requirements

Clarify ingredient disclosure requirements apply to online sales, comparable to product labeling

Require third-party seller to consent to jurisdiction of local courts and appoint local agent acting on its behalf

# Complementary Measures to Liability Reform



Licensing and registration legal framework, including ingredient labeling of cosmetics sold online, and clear legal authority to regulate/prohibit online sales



Capacity to conduct periodic purchasing and testing of online creams



Supporting tools and measures (alert systems, detention lists)



Collaboration with governments where creams are manufactured

# Final Observations

- Skin lightening products are the ASGM of the products area
  - Many informal participants
  - Decentralized illegal activity
  - Insufficient awareness of health risks
  - Requires attention on both supply and demand side
  - Widespread geographically
- Online platform liability reform necessary
- Enforcement is a serious challenge
- Anticipate post-2020 compliance issues and greater attention to new legal frameworks, capacity building, international cooperation, online sales
- Needs to be a Minamata Convention priority

