## **Innovations in Contraceptive Packaging**

SSWG Meeting Climate and Health Supply Chains January 31, 2023

# **Background**



USAID and UNFPA deliver over \$200 million in contraceptives and condoms to over 30 countries annually.

Data source: GFPVAN

Note: USAID shipments shown here are only those funded by the Office of Population and Reproductive Health.

# **Background**

# A team effort between USAID, UNFPA, GHSC-PSM



#### Desk Study

Conducted desk study to document where UNFPA and USAID packaging specifications align and diverge and to identify rationale for current packaging specifications across key contraceptive products. Conducted interview with key suppliers to understand manufacturing capabilities and constraints.



#### **Case Studies**

Conducted case studies in
Mozambique, Rwanda, Zambia, and
Zimbabwe to understand impact of
packaging configurations on in-country
supply chains across key contraceptive
products.



# Green Packaging Innovations

Explored opportunities for innovations in greener packaging and reduction of environmental impact with focus on MPA-IM.

# Why does contraceptive packaging matter?

Product packaging is important for contraceptive security



- Product labeling
- Co-packaging
- Quality integrity
- Product waste
- Plastic and cardboard waste

Source: The Logistics Handbook: A Practical Guide for the Supply Chain Management of Health Commodities

# Packaging is important at every supply chain level

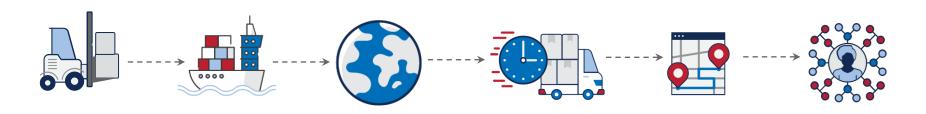
### Global supply chain

Manufacturing, global procurement, international delivery and warehousing

#### In-country supply chains

In-country storage and distribution, picking/packing at warehouses

Management at service delivery points





Export cartons on pallets



Inner boxes or saleable units



Dispensing unit

# Methodology



- Investigate best practices in green packaging across key contraceptive product categories procured by USAID and UNFPA and develop recommended changes to secondary and/or tertiary packaging
- Ensure recommendations would not negatively impact product quality
- Assess the environmental impact
   of various MPA-IM packaging options, including
   impact feasibility assessment and/or cost
   benefit analysis for each recommendation

# What is green packaging?





# What is green packaging?

Packaging plays a critical role in almost **EVERY** industry, **EVERY** sector and **EVERY** supply chain.

In the pharmaceutical industry, packaging is essential to maintain the quality of the product. Packaging protects the product not only from physical damage but also from biological degradation.



Green packaging initiatives may include:

**RE**duce Reduce the volume of packaging materials

**RE**use Reuse secondary

and tertiary packaging materials

**RE**cycle Use recycled materials

## Recommendations

#### Harmonization improvements

- Male condoms: USAID and UNFPA catalogs offer the same export carton of 3,000 pieces and inner boxes of 100 pieces
   Implemented in 2020
- MPA-IM: Remove the safety box; order separately
   Safety boxes available separately in USAID catalog

#### Sustainability improvements

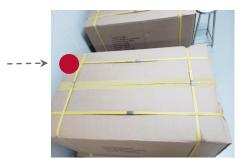
- Remove plastic straps from export carton
- Remove plastic liners and Styrofoam from export carton
- Remove logos from export carton
- Separate safety box from MPA-IM co-package
- Develop and introduce 20-vial MPA-IM bundle

#### Implemented in 2023

## Removal of plastic straps from export cartons

#### **Environmental Savings**

- Elimination of 11,008 kg of plastic
- Elimination of 156,307 kg of CO2 emission
- Elimination of 385,264 KwH





**Cost Savings** 

Estimated total annual savings of \$17,766

Additional Benefits

Minimize damage to export cartons.

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### Removal of plastic liners and Styrofoam from export carton

#### **Environmental Savings**

## Cost Savings

- Elimination of 872 kg of plastic
- Elimination of 12,389 kg of CO2 emission
- Elimination of 30,535 KwH

• Estimated total annual savings of \$3,847





#### Additional Benefits

 Less than 1% incident rate due to water damage.

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## Removal of logos from export cartons

#### **Environmental Savings**

#### Cost Savings

- Elimination of 47g of vinyl
- Minimizes release of ink, glue and sticker residue into the environment

• Estimated total annual savings of \$940

#### Additional Benefits

 Enhanced fungibility of product to more effectively respond to emergency requests

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## Separate safety box from MPA-IM co-package

#### **Additional Benefits**

- Facilitates in-country distribution of safety box separately
- Facilitates opportunity for local procurement of safety box
- Harmonization of SKUs between USAID and UNFPA



## **MPA-IM 20 Package**



- 20 vials of MPA-IM
- 20 syringes, 1 ml
- 1 leaflet (instructions of use)

Harmonization of requirements from USAID and UNFPA towards MPA-IM 20 Package will result in:

- Reduction of total shipping volume by 40%
- Reduction of secondary packaging material by 70%
- Meeting end-user preferences / fungibility
- Reducing wastage and incineration of expired products
- Suppliers to stock MPA and thereby reduce the need for air shipments

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#### **Contact Us!**

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The USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project is funded under USAID Contract No.AID-OAA-I-I5-0004. GHSC-PSM connects technical solutions and proven commercial processes to promote efficient and cost-effective health supply chains worldwide. Our goal is to ensure uninterrupted supplies of health commodities to save lives and create a healthier future for all. The project purchases and delivers health commodities, offers comprehensive technical assistance to strengthen national supply chain systems, and provides global supply chain leadership. For more information, visit ghsupplychain.org.

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