Innovations in Contraceptive Packaging

SSWG Meeting
Climate and Health Supply Chains
January 31, 2023
USAID and UNFPA deliver over $200 million in contraceptives and condoms to over 30 countries annually.
**Background**

A team effort between USAID, UNFPA, GHSC-PSM

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**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.

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**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.

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**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

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:

- **REduce** Reduces the volume of packaging materials
- **REuse** Reuse secondary and tertiary packaging materials
- **REcycle** 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)*
### 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.

*Estimated Savings based on FY22 USAID and UNFPA procurement volumes.*
## Removal of plastic liners and Styrofoam from export carton

<table>
<thead>
<tr>
<th>Environmental Savings</th>
<th>Cost Savings</th>
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<tbody>
<tr>
<td>• Elimination of 872 kg of plastic</td>
<td>• Estimated total annual savings of $3,847</td>
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<tr>
<td>• Elimination of 12,389 kg of CO2 emission</td>
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<td>• Elimination of 30,535 KwH</td>
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### Additional Benefits

• Less than 1% incident rate due to water damage.

*Estimated Savings based on FY22 USAID and UNFPA procurement volumes.*
## Removal of logos from export cartons

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<tr>
<th>Environmental Savings</th>
<th>Cost Savings</th>
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<tr>
<td>• Elimination of 47g of vinyl</td>
<td>• Estimated total annual savings of $940</td>
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<td>• Minimizes release of ink, glue and sticker residue into the environment</td>
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**Additional Benefits**

• Enhanced fungibility of product to more effectively respond to emergency requests

*Estimated Savings based on FY22 USAID and UNFPA procurement volumes.*
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
The USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project is funded under USAID Contract No. AID-OAA-I-15-0004. 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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