

# Assessing the Total Market for Female Condoms in Malawi and Zambia

**SEPTEMBER 2018** 









#### **Acronyms**

CBO Community-based Organizations

**CCP** Comprehensive Condom Programming

**CPP** Condom Program Pathway

**DHS** Demographic and Health Surveys

**EECO** Expanding Effective Contraceptive Options

FP Family Planning
FC Female Condom
FSW Female Sex Workers

GHSC-PSM Global Health Supply Chain Program - Procurement and Supply Management

GDP Gross Domestic Product

HMIS Health Management Information System

HP+ Health Policy Plus

HIV Human Immunodeficiency Virus

JICA Japan International Cooperation Agency
LGBT Lesbian, Gay, Bisexual and Transgender
LMIC Low- and Middle-Income Countries

**eLMIS** Electronic Logistics Management and Information System

LMIS Logistics Management and Information System

MAH Marketing Authorization Holder

MGH Mann Global Health
MOH Ministry of Health

MSM Men Who Have Sex With Men

NAC
National AIDS Commission (Malawi/Zambia)
NCCC
National Condom Coordinating Committee
NDQCL
National Drug Quality Control Laboratory

NGO Non-governmental Organizations

NASF National AIDS Strategic Framework (Zambia)

OOP Out-of-Pocket Payments

PMPB Pharmacy, Medicines, and Poisons Board

PSI Population Services International

RH Reproductive Health
SFH Society for Family Health

SM Social Marketing

STI Sexually Transmitted Infection

TMA Total Market Approach
TWG Technical Working Group

UNFPA United Nations Population Fund

USAID United States Agency for International Development

WCG Cares

WHO World Health Organization



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Photo Credit: Nora Miller

#### **Executive Summary**

The female condom (FC) is the only woman-initiated contraceptive that offers triple protection against unintended pregnancy, HIV, and other sexually transmitted infections (STIs). Historically, the female condom has been underfunded and underused, falling victim to a cycle of limited promotion and demand generation, low availability, and higher manufacturing costs compared to other methods. The past several decades have seen major shifts in funding for HIV prevention and male condom programs, yet little has been done to harness the potential of female condoms. Moderate financial investments and one-off initiatives have drawn attention to the importance of this method, yet there has been little effort to develop robust female condom markets.

Under the United States Agency for International Development (USAID)-funded Expanding Effective Contraceptive Options (EECO) project, WCG Cares (WCG) conducted a Total Market Approach (TMA) assessment in Zambia and Malawi from June to August 2018 to identify potential strategies for fostering sustainable female condom markets. The assessment included a desk review of relevant literature, as well as in-depth interviews with key stakeholders using structured questionnaires to identify key market failures in the female condom ecosystem and opportunities for strengthening support for this method.

Several key themes arose in both countries:

- The concept of a total market approach for female condoms is in a nascent stage in both Malawi and Zambia.
   While national strategy documents commit to applying a TMA lens to condom programming, there is still room for enhancing technical capacity for implementing and monitoring TMA strategies.
- Both Malawi and Zambia are reliant on donor funding for female condom programs. However, donor funding for female condoms has declined and is volatile, resulting in decreased access and availability.
- Collection and dissemination of female condom program information is a challenge. There is a lack of data
  on the relationship between use and need for end users. While procurement figures are usually available for
  understanding supply, there is inaccurate or missing data from the various distribution points on the way to
  the end user.
- Demand generation is a critical component of building markets for female condoms. However, raising awareness and acceptability of female condoms must be a long-term and sustained effort, rather than a one-off initiative.

This report presents the results of the TMA assessment, including an overview of the key challenges and opportunities for female condom programs in each country. The report concludes with overarching recommendations for creating more equitable and sustainable female condom programs.

#### Introduction

Over 214 million women in developing countries have an unmet need for family planning (FP)<sup>1</sup>. The need for a diverse range of contraceptive options is even more important for women who also need protection against HIV, particularly in sub-Saharan Africa, where 56% of new HIV infections occur among women<sup>2</sup>.

The female condom (FC) is the only woman-initiated contraceptive that offers triple protection against unintended pregnancy, HIV, and other sexually transmitted infections (STIs). Historically, the female condom has been underfunded and underused, falling victim to a cycle of limited promotion and demand generation, low availability, and higher manufacturing costs compared to other methods. The past several decades have seen major shifts in funding for HIV prevention and male condom programs, yet little has been done to harness the potential of female condoms. Moderate financial investments and one-off initiatives have drawn attention to the importance of this method, yet there has been little effort to develop robust female condom markets.

#### A TOTAL MARKET APPROACH TO FEMALE CONDOMS

A total market approach (TMA) is a process for developing strategies that increase access to priority health products and services<sup>3</sup>. TMA begins with an assessment of current market performance to determine which market functions are underperforming so that market failures can be strategically addressed. Applying this lens to female condoms provides information that can help stakeholders improve coordination and better target resources for this important product.

There are many frameworks available that apply a total market approach to health products. For the purposes of this study, WCG Cares (WCG) adapted the Mann Global Health (MGH) Condom Program Pathway (CPP) (Figure 1) to identify gaps and failures in female condom markets in Malawi and Zambia<sup>4</sup>. The Condom Program Pathway assesses specific condom market functions, including all the necessary elements for a successful condom program at country-level. Key market functions in the CPP fall under the broad categories of Condom Program Stewardship, Condom Program Development, and Condom Program Outcomes. The CPP can be used to analyze the state of market functions in a given context, as well as to identify why the functions may be failing.

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<sup>&</sup>lt;sup>1</sup> Guttmacher Institute. 2017. Adding It Up: Investing in Contraception and Maternal and Newborn Health, 2017. <a href="https://www.guttmacher.org/fact-sheet/adding-it-up-contraception-mnh-2017">https://www.guttmacher.org/fact-sheet/adding-it-up-contraception-mnh-2017</a>

<sup>&</sup>lt;sup>2</sup> UN Women. 2018. Facts and Figures: HIV and AIDS. <a href="http://www.unwomen.org/en/what-we-do/hiv-and-aids/facts-and-figures">http://www.unwomen.org/en/what-we-do/hiv-and-aids/facts-and-figures</a>

<sup>&</sup>lt;sup>3</sup> SHOPS Plus. 2016. Total Market Approach. <a href="https://www.shopsplusproject.org/tma">https://www.shopsplusproject.org/tma</a>

<sup>4</sup> Mann Global Health. 2017. The Condon Program Pathway. http://mannglobalhealth.com/wp-content/uploads/2017/11/MGH\_Condom-Landscaping-Report\_Final\_091117.pdf

Figure 1. MGH CONDOM PROGRAM PATHWAY

# Female Condom Program Stewardship



# Female Condom Program Outcomes



- Leadership & Coordination
- Program Analytics
- Financing
- Policy & Regulation

- Supply Functions
- Demand Functions

- Use Behaviors
- Equity
- Sustainability

### **Study Methods**

Under the United States Agency for International Development (USAID)-funded Expanding Effective Contraceptive Options (EECO) project, WCG conducted a TMA assessment in Zambia and Malawi from June to August 2018 to identify potential strategies for fostering sustainable female condom markets. The assessment included a desk review of relevant literature, as well as in-depth interviews with key stakeholders using structured questionnaires to identify key market failures in the female condom ecosystem and opportunities for strengthening support for this method.



#### Female Condoms: Global Considerations

Female condoms play an important role in the family planning and HIV prevention method mix as the only woman-initiated method offering triple protection against unintended pregnancy, HIV and STIs. A systematic review of female condoms found strong evidence that the provision of female condoms can increase the number of protected sex acts, with additional evidence that the introduction of the female condom may also decrease transmission of STIs within a population<sup>5</sup>. There is also evidence to suggest that female condoms may reach women who are less likely to use other dual/triple protection methods, such as male condoms<sup>5</sup>. Furthermore, female condoms can be used internally for anal intercourse, and thus can help prevent HIV transmission among men who have sex with men (MSM)<sup>6</sup>.

There are many types of female condoms, with distinct differences in mode of use. Given the variety, training healthcare providers and women on female condom use can be more challenging than for male condoms, which are relatively standard in terms of size, use, and material. Of the 10 female condom brands currently available or under development, only 4 manufacturers have been prequalified through the World Health Organization (WHO)/ United Nations Population Fund (UNFPA) prequalification program (Figure 2 below), which allows them to be procured by the United Nations and other international purchasers for public-sector distribution.

The per unit cost of female condoms is significantly higher than that of male condoms, and is unlikely to decrease unless substantial investments are made in both demand generation to improve sales volume, enabling economies of scale, as well as technology improvements to reduce manufacturing costs. Price is an important consideration in FC programs, as evidence suggests that the product can often be cost-prohibitive to many women if it is not highly subsidized or provided free of charge<sup>7</sup>. However, a simulation study in South Africa concluded that the FC could be cost-effective if well promoted and targeted toward the appropriate population segments, such as commercial sex workers and women with casual partners<sup>8</sup>. Further evidence from social marketing programs in several countries suggests that there is a willingness to pay for the product among wealthier population segments. While program sustainability through out-of-pocket payments seems unlikely in the near-term, increasing demand and ensuring equitable access to FCs are critical first steps in improving FC markets.





**Female Condoms** 

4
prequalified
manufacturers

Photo Credit: © PSI / Gareth Bentley

 $\mathbf{6}$ 

<sup>&</sup>lt;sup>5</sup> Vijayakumar, G. et al. 2006. A review of female-condom effectiveness: patterns of use and impact on protected sex acts and STI incidence. International Journal of STD & AIDS, 17(10): 652-9. https://www.ncbi.nlm.nih.gov/pubmed/17059633

 $<sup>^{6}\,\</sup>text{CDC.}\,2016.\,\text{Condom}\,\text{Effectiveness}\,\text{-}\,\text{Female}\,\text{Condom}\,\text{Use.}\,\underline{\text{https://www.cdc.gov/condomeffectiveness/Female-condom-use.html}$ 

<sup>&</sup>lt;sup>7</sup> Francis-Chizororo, M. & Natshalaga, N.R. 2003. The female condom: acceptability and perception among rural women in Zimbabwe. African Journal of Reproductive Health, 7(3): 101-16. https://www.ncbi.nlm.nih.gov/pubmed/15055153

<sup>&</sup>lt;sup>8</sup> Marseille, E. et al. 2001. Cost-effectiveness of the female condom in preventing HIV and STDs in commercial sex workers in rural South Africa. Social Science & Medicine, 52 (1): 135-48. https://www.ncbi.nlm.nih.gov/pubmed/11144911

Figure 2. WHO/UNFPA PREQUALIFIED FEMALE CONDOMS

| PRODUCT NAME   | MANUFACTURER                              | LOCATION | PRICE/FC |
|----------------|---|----------|----------|
| Cupid®         | Cupid, Ltd.                               | India    | \$0.35   |
| FC2®           | The Female Health Company                 | Malaysia | \$0.50   |
| Woman's Condom | Shanghai Dahua Medical Apparatus Co. Ltd. | China    | \$0.80   |
| Velvet         | HLL Lifecare, Ltd.                        | India    | \$0.35   |

Prices from: ICMI+

#### FINANCING OPTIONS FOR FEMALE CONDOMS

In low- and middle-income countries (LMIC), HIV prevention and treatment, as well as contraceptive products and services, are financed through a combination of donor and government funding, out-of-pocket payments (OOP) by consumers, and, less commonly, health insurance. In many LMIC, foreign donors provide the majority of HIV and FP funding, through bi/multilateral agreements or private foundations. Donor funding, however, can be volatile, and gaps or decreases in funding put pressure on recipient countries' governments and consumers to cover more of the cost of HIV prevention and treatment as well as contraceptive products and services. Given declining foreign donor funding for female condoms and the low ability to pay among key and priority populations, equitable access to this product in the future may depend largely on domestic financing.

#### TMA ASSESSMENT RESULTS

The following section presents the results of the TMA assessment conducted in Malawi and Zambia from June to August 2018. The results are organized by country, with overall recommendations at the end.

# Malawi

#### **HIV & FAMILY PLANNING CONTEXT**

Malawi has made efforts to reduce the burden of HIV over the last decade, yet HIV prevalence remains high at 10.6% (compared to 11.8% in 2004)9,10. The epidemic is generalized, with unprotected heterosexual intercourse between married or cohabitating partners accounting for 67% of all new infections<sup>11</sup>.

Young people are at high risk of HIV due to early sexual activity and marriage. The burden of disease also disproportionately affects women, with HIV prevalence among adult women at 12.8% vs 8.2% for men<sup>12</sup>. This difference is even more striking among the 25-29-yearold group, where women have an HIV prevalence of 14.1% vs 4.8% among their male counterparts<sup>12</sup>. While knowledge about HIV is increasing, condom use is still low, with only 13.9% of sexually active, unmarried women using male condoms as contraception, and fewer than 0.7% using female condoms<sup>13</sup>.

Voluntary family planning has increased over time, with unmet need decreasing to its current level of 19% among currently married women. However, sexually active unmarried women have less of their demand for family planning satisfied than their married counterparts (53% versus 75%, respectively)<sup>13</sup>.

Women report limited negotiating power within their relationships. Only 46% of women say that they can say no to their husband if they do not want to have sexual intercourse, and only half of all women (49%) say they can ask their husband to use a condom<sup>13</sup>.

Female condoms have the potential to empower women within this context of high HIV burden, a persistent gap of unmet need for family planning, and gender dynamics that leave women with little negotiating power within relationships.

- 9 Malawi Population-based HIV Impact Assessment (MPHIA) 2015-16: First Report https://phia.icap.columbia.edu/wp-content/uploads/2017/11/Final-MPHIA-First-Report\_11.15.17.pdf
- <sup>10</sup> Malawi Demographic and Health Survey 2004. https://dhsprogram.com/pubs/pdf/ FR175/FR-175-MW04.pdf
- <sup>11</sup> Malawi AIDS Response Progress Report. 2015. http://www.unaids.org/sites/ default/files/country/documents/MWI\_narrative\_report\_2015.pdf
- <sup>12</sup> Malawi Population-based HIV Impact Assessment (MPHIA). 2016. Summary Sheet: Preliminary Findings. <a href="https://www.hiv.health.gov.mw/images/Documents/">https://www.hiv.health.gov.mw/images/Documents/</a> MALAWIFactsheet.pdf
- <sup>13</sup> Malawi Demographic and Health Survey 2015-16. https://dhsprogram.com/pubs/ pdf/FR319/FR319.pdf



GDP PER CAPITA: \$338 USD

• LIFE EXPECTANCY: 63.2 YEARS

Source: The World Bank



900,000 people living with HIV



10.6% adult HIV prevalence



28,000 new HIV infections annually

Source: MPHIA 2015-2016

#### **HIV & Family Planning by the Numbers - Malawi**

# Women with Comprehensive Knowledge **Modern Contraceptive Use** of HIV/AIDS **45**% 42% Modern contraceptive cse Comprehensive knowledge No comprehensive knowledge Traditional/no use Condom Use at Last High-Risk Sex **Unmet Need for FP** 27% 19% Used a condom Unmet need Did not use a condom Met need

#### **HIV PREVALENCE BY SUBPOPULATION IN MALAWI**

**General Population** 

10.6%

Female Sex Workers (FSW) 24.9%









## Young Women (15-24) 5.2%



# 2.3%

Young Men

(15-24)

Sources: UNAIDS Data Book, Malawi DHS 2015-2016, MPHIA 2015-16

#### The Female Condom in Malawi: A Brief History

#### 2000

FC1 piloted with funding from UNFPA with limited uptake at the community level

#### 2004

FC1 re-piloted in 22 areas across the country with improved support for provider training

FCs featured in National Condom Strategy 2005 - 2014

#### 2006

MOH and UNFPA host joint regional meeting to address gaps in coordination, supply, distribution, and access to FCs

#### 2008

FC2 Registered and distributed for free by MOH

PSI launches social marketing campaign for *Care* FC with support from MOH and UNFPA

#### 2009

USAID | DELIVER project transitions female condoms to national supply chain to be managed by Central Medical Stores (previously controlled by UNFPA/MOH RHU)

#### 2014

Pilot of Cupid Female Condom in northern region of Malawi (JICA)

USAID | EECO project launches social marketing brand, Whisper, in Lilongwe, Mzuzu, and Blantyre

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#### 2015-2020

National Condom Strategy highlights the need for a Total Market Approach to male and female condoms



Lilongwe, Mzuzu, ar

#### State of the Female Condom Market

In 2017, there were four female condoms brands available in Malawi including the FC2 (free distribution through the MOH), Care FC2 (socially marketed, SM, by PSI), Whisper Woman's Condom (socially marketed by WCG Cares and PSI), and Cupid (available via limited pilot from the Japan International Cooperation Agency, JICA). With the conclusion of the Whisper pilot in 2018, the FC2 will be the only female condom available on the market either through free or socially marketed distribution. There is currently no unsubsidized, commercially marketed female condom available in Malawi.

Distribution of the socially marketed Care FC2 began in 2008, with annual sales figures averaging approximately 75,000 units per year over the past 10 years.

Through the EECO project, WCG Cares and PSI conducted a pilot distribution of the Whisper Woman's Condom from 2015-2018, selling a total of 23,400 condoms in Lilongwe, Mzuzu, and Blantyre.

A pilot project from JICA assessed the acceptability of the Cupid FC in northern Malawi in 2014-15, distributing free product to forestry workers and female sex workers in the area.

Since the launch of the female condom in 2000, the MOH has distributed between 200,000 and 1.2 million units annually, with peak distribution taking place between 2009-2011 when there was a concerted effort by UNFPA and other partners to increase visibility and support for the female condom. In particular, a partnership with The Hunger Project brought the female condom to rural women through integrated programming alongside nutrition, HIV and economic empowerment programming. In recent years, however, demand has dropped, resulting in decreasing procurement and distribution of the FC2 to less than 500.000 units in 2017.



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92.5% Malawian women know about FCs

#### **FC BRANDS 2017** \*PILOT DISTRIBUTION







Cupid\*

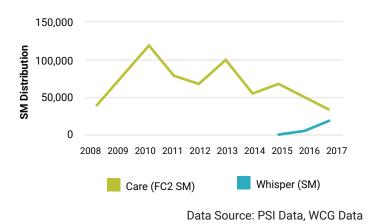
Care (SM)

FC2 (Free)

Whisper\* (SM)

Photo credits: IRIN News (Cupid), Nora Miller (Whisper, Care, FC2)

#### MALAWI SOCIAL MARKETING FC **DISTRIBUTION (2008-2017)**



#### **PUBLIC SECTOR CONDOM NEEDS QUANTIFICATION (2017):**





Source: HP+ Condom Distribution and Reporting Assessment



<1% Malawian women currently using FCs

#### Findings of the Total Market Assessment

The following section draws on the Mann Global Health Condom Program Pathway to assess Malawi's female condom market.

#### **MALAWI: FC Program Stewardship**

#### **DEFINITION:**

Government leadership and coordination are required to set the overall strategy/direction of the program, and to coordinate different market players, market facilitators, donors, and private actors.



Coordination

Leadership &

## BACKGROUND:

The National AIDS Commission (NAC) serves as secretariat in coordinating and managing the national response to HIV. NAC duties include coordinating Comprehensive Condom Programming (CCP) implementation, capacity building, and monitoring. NAC hosts quarterly and annual meetings to review the objectives of the national condom strategy. The NAC has designated a National Condom Coordinating Committee (NCCC) comprised of government, implementing partners, non-governmental organizations (NGOs), and commercial sector players who are tasked with ensuring a coordinated approach to condoms<sup>14</sup>.

Malawi's National Condom Strategy (2015-2020) as well as its HIV Prevention Strategy (2015-2020) highlight the desire to use a total market approach, with a clear vision outlined for a TMA for condoms. Notably, the Condom Strategy intentionally mentions both male and female condoms at every use of the word "condom".

For the male condom market in particular, stakeholders from NGOs such as PSI and Palladium have worked with the government to introduce TMA concepts. However, there remains a need for technical training and support to operationalize a TMA at the national level.

The female condom market grew between 2004 and 2010 from distribution of approximately 200,000 units annually to a peak of 1,200,000, when coordinated leadership and advocacy efforts by UNFPA and the MOH promoted female condoms as part of the reproductive health agenda. Female condom uptake increased when UNFPA partnered with The Hunger Project to bring FCs to rural women. In recent years, however, FCs have had a reduced role in the contraceptive method mix.

Source: Malawi DHS 2015-2016 13

<sup>14</sup> Cisek, C. & Khomani, F. 2018. Condom Distribution and Reporting Assessment: Strengthening Linkages at National, District, Facility, and Community Levels in Malawi. Washington, DC: Palladium, Health Policy Plus. http://www.healthpolicyplus.com/ns/pubs/8201-8356\_CondomDistributionandReportingAssessment.pdf



#### **LEADERSHIP & COORDINATION CHALLENGES:**

- The MOH is overstretched and needs support to coordinate market players around a vision for a healthy FC market.
- Donor funding for FCs has declined and is volatile, resulting in decreased access and availability.



#### **KEY RECOMMENDATIONS:**

- The NAC should select a dedicated market facilitator within the NCCC to provide support for developing the female condom market specifically. The focus areas for this role are to support the government with capacity-building for leadership and coordination of female condom initiatives, and to create a vision and action plan for a healthy female condom market. In addition, the market facilitator should work with other market actors to ensure all levels of intervention are aligned with the overall market vision.
- Advocacy is required to maintain and increase funding for FCs. The government, donors, and stakeholders should advocate for resources for condom programming and medium- to long-term commodity security. Funding should be earmarked for strategic interventions that prioritize market weaknesses such as demand generation and FC supply chain strengthening.



#### DEFINITION:

Total market data are necessary to analyze condoms needs and condom market performance across all players and functions, in order to adjust and plan for interventions.



## **BACKGROUND:**

Market actors have limited information on the relationship between FC use and need at the population level. For example, data on acceptors of FCs as a family planning method are tracked in the Health Management Information System (HMIS) at FP clinics; however, information on those who use FCs for HIV/STI prevention is not recorded at HIV/STI clinics.

Program experiences from social marketers and NGOs are shared (in an ad hoc manner) at HIV and Reproductive Health (RH) Technical Working Group (TWG) meetings. For example, there have been two pilot-scale acceptability studies among consumers in recent years for new types of FCs, including a JICA-led pilot of the Cupid Female Condom (2014-15), as well as post-market research conducted under the EECO project in 2016 to assess acceptability of the Woman's Condom. The results of these pilots were presented at TWG meetings.

Community-based Organizations (CBOs) often acquire and distribute female and male condoms from public-sector facilities to their target beneficiaries. However, data on distribution/uptake within these programs is reported only sporadically to the facility from which they received stock. It is not clear how this information is used to support condom programming at the national level.

In response to the lack of data on condom distribution across all sectors, the Health Policy Plus (HP+) project, led by Palladium, began a Condom Dashboard as of 2017 to track male and female condom distribution in the public and social marketing sectors.



#### PROGRAM ANALYTICS CHALLENGES:

- · There is limited population-level data to understand which population segments could most benefit from increased availability of female condoms, as well as the potential for redirecting subsidy to where it is most needed.
- · Data on distribution by HIV/STI facilities, CBOs, and other sources of public sector condoms are underreported and result in inaccurate trend data across different health departments<sup>14</sup>.
- TWG meetings are a useful venue for sharing social marketing program experiences with relevant stakeholders; however, there is no long-term strategy in place for documenting and disseminating FC market/program data.
- While there is an emphasis on understanding funding gaps and supply gaps for FCs at the national level, there is less information available on FC demand, consumption, and use behaviors.



Program Analytics

#### KEY RECOMMENDATIONS:

- · Both the government and social marketing organizations should invest in more frequent collection and dissemination of program analytics on female condom use behaviors and population size estimates.
- In addition to tracking female condom distribution under the HP+ Condom Dashboard, FC program experiences from MOH, SM organizations and others should be documented and disseminated in a systematic way at the national level.
- The MOH should integrate consistent condom reporting in the HMIS for all departments (including HIV and STI clinics) to improve analysis of condom distribution trends.
- · National facilities should strengthen reporting requirements from CBOs and NGOs who distribute free condoms.
- · Stakeholders should leverage NCCC meetings to ensure that program data are being used by implementing partners to adapt, readjust and improve program implementation.

#### **DEFINITION:**

Coordinated and adequate financing is required for all critical aspects of condom programming, with appropriate use of subsidy to address gaps in the condom program.



## BACKGROUND:

Funding for female condoms and their programming is donor-dependent and modest in size. The cost of FCs is included in the lump sum line item for RH commodities. The national budget also includes funding for prevention programming and education more generally. Stakeholders pointed out that during periods of budget contractions, female condoms are typically the first product to be cut from receiving support.





#### A FINANCING CHALLENGES:

- There is limited funding allocated to female condoms at the national level. Social marketing programs are reliant on donor support for condoms, which has been both volatile and decreasing for male and female condoms in recent years<sup>14</sup>.
- Finance data on condom programs is aggregated across many different activities, which masks the investment made - or not made - in FCs.



#### KEY RECOMMENDATIONS:

- Donors should be transparent about their intended investment in FCs in coming years and should work with the MOH to plan for government-owned procurement of FCs over time, as appropriate.
- MOH and donor agencies should increase funds for demand generation and consumer research. However, any efforts at increasing demand must be linked with supply.
- MOH should track and analyze FC funding trends against use behaviors within target populations to determine which strategies are the most effective for increasing availability, acceptability and use.



#### **DEFINITION:**

Enabling environment factors should support all market players and target populations, while ensuring compliance with national standards.



#### **BACKGROUND:**

Malawi's policy environment is supportive of the rights of youth, FSWs, and lesbian, gay, bisexual and transgender (LGBT) Malawians to access health services. However, stigma and discrimination against these populations from healthcare providers, law enforcement officials, and the general public results in unequal treatment<sup>15</sup>.



## REGULATORY & QUALITY ASSURANCE:

- · Malawi's Pharmacy, Medicines, and Poisons Board (PMPB) is responsible for the registration of pharmaceutical products and devices and requires listing of FC suppliers.
- There is currently no in-country quality assurance testing facility for FCs or male condoms; condoms must pass quality assurance standards upon importation, which may add to the final cost to consumers of the imported product or potentially serve as a barrier to market entrance for commercial sector players.
- · Condoms have a zero-rated tax status.
- Female condoms are listed in Malawi's Essential Medicines List.



Policy & Regulation

#### POLICY & REGULATION CHALLENGES:

· Despite improved legal protection of vulnerable populations in the last decade, marginalized groups still face barriers to accessing health services.



#### KEY RECOMMENDATIONS:

- In line with Malawi's National Condom Strategy (2015-2020), the MOH and partners should continue to introduce and enforce policies and regulations that protect the rights of vulnerable populations to access and use female condoms.
- Advocacy and policy dialogue related to female condoms should be intensified across all actors (including other branches of government) to raise awareness of policy barriers to female condom access and use.

<sup>15</sup> Malawi's National Youth Friendly Health Services Standards (2007) state that all young people should be able to access SRH services and information, and providers should be properly trained on youth-friendly services. However, the Ministry of Education prohibits the distribution of condoms in schools in favor of abstinence education. Encouragingly, the Constitution protects the legal rights of commercial sex workers to practice their trade. However, FSWs still experience abuse and wrongful arrests by law enforcement who misinterpret the law. In addition, while Malawi's government has suspended prosecutions under anti-gay laws, there remains a high level of stigma as well as inequality for LGBT people seeking health services and commodities

### **MALAWI: FC Program Development**



#### **1** DEFINITION:

"Supply" refers to a comprehensive approach looking at the entire value chain in the public sector and across private channels, including quantification, forecasting, procurement efficiencies, supply chain management and pricing structures.



#### **BACKGROUND:**

#### **Public Sector**

Public sector supply takes place in three parallel supply chains, depending on the procurement source. The national Health Technical Support Services under the MOH oversees overall logistics, LMIS reporting, and coordination of commodities using a "push" model. However, the three main organizations that currently provide condoms operate within separate supply chains in the following manner<sup>14</sup>:

- · Central Medical Stores Trust is the government's primary supply chain, which often receives stock from UNFPA and other donors.
- USAID distributes free commodities through Global Health Supply Chain Procurement and Supply Management (GHSC-PSM) and PSI's supply chain under the One Community project.
- The Global Fund distributes free condoms through Bollore Transport and Logistics Malawi, a third-party, private sector company.

Routine data on public sector supply are unreliable. While some districts regularly submit data, many areas face reporting challenges, especially if there are frequent internet blackouts. An assessment in 2013 showed that only 58% of health facilities reported monthly data in a timely manner. Due to challenges at various points of the supply chain, local NGOs, donors and implementing partners work together to prevent stock-outs. However, this ad hoc, parallel distribution system creates issues for planning future commodity needs<sup>16</sup>.

#### **Social Marketing**

PSI is the only social marketing organization distributing female condoms with support from USAID (Care FC2 and Whisper Woman's Condom). Care FC2 is available nationwide in health clinics, pharmacies, and non-traditional outlets such as bars and hair salons. Whisper Woman's Condom is distributed in similar facilities as Care FC2 but limited to the three major cities of Lilongwe, Blantyre and Mzuzu. Whisper Woman's Condom distribution under the EECO project is scheduled to end in September 2018.

Distributors of socially marketed female condoms may be incentivized to stock the product because they can charge a margin on each condom sold. Post-market research conducted under the EECO project for the Whisper Woman's Condom in 2016 showed that retailers of the socially marketed product set a wide range of prices depending on client interest in the product. Some retailers sold Whisper with zero margin when stock was not moving, and others charged up to 200% of product cost<sup>17</sup>. However, due to the historically low client demand for FCs, some potential distributors of social marketing FCs are hesitant to stock the product.

#### **Private Employers/Commercial Sector**

Private businesses often distribute free or socially marketed FCs and male condoms to employees as part of their integrated health and HIV services. While procured from national facilities, this stock is not tracked within the national system once it leaves the warehouse.

At present, there is no commercial sector supply of female condoms.



**Supply Function** 

#### A SUPPLY FUNCTION CHALLENGES:

- Public facilities often face stock-outs due to the "push" nature of the national supply chain. Health personnel feel that emergency orders are unlikely to be filled and so it is better to wait for the next scheduled shipment rather than submit a request.
- While there is a profit to be made stocking social marketing FCs, potential distributors are hesitant to stock the product until they see client demand.
- · Private employers are an important player in the supply of free condoms, but this information is not captured in the national LMIS.
- · FC users may not frequent traditional distribution points such as health clinics and pharmacies; however, this assertion requires better data to inform decision-making.

#### KEY RECOMMENDATIONS:

- The MOH should increase advocacy and awareness of the protocol for emergency orders to prevent stock-outs at district and facility level.
- Supply of social marketing condoms should be coupled with demand generation among users as well as healthcare provider/distributor education to entice distributors to stock the product.
- To improve understanding of supply movement, networks of private employers such as the Malawi Business Coalition Against AIDS could report on condom distribution through private workplaces to the national government on a regular basis.
- Continue to use creative and non-traditional outlets for promoting and distributing FCs (such as condom dispensers, hair salons and youth centers) for both public sector and SM female condoms.

<sup>16</sup> Ministry of Health, Malawi. 2017. Malawi National Condom Strategy, 2015-2020. http://www.healthpolicyplus.com/ns/pubs/7184-7325\_MalawiNationalCondomStrategyJuly

<sup>&</sup>lt;sup>17</sup> Miller, N., Mann, C., Jackson, A., & Harris, D. 2018. Lessons Learned from the Woman's Condom Introduction in Zambia and Malawi. http://www.wcgcares.org/wp-content/ uploads/2018/10/WC-Case-Study-3\_FINAL-digital.pdf

#### **DEFINITION:**

Increasing and sustaining FC use requires a dedicated focus on demand generation within priority target populations.



#### **BACKGROUND:**

Fewer than 1% of women currently use FCs as their method of choice<sup>13</sup>; however, several studies in the region show that education and awareness-raising activities are critical to increasing demand for this method<sup>8,18</sup>. Formative research conducted by the EECO project with men and women in Malawi pointed to a number of barriers to use of the female condom, including: a high level of stigma associated with female condoms (which are often regarded as a method for sex workers), women's lack of negotiating power within sexual relationships, and concerns about the acceptability of the method itself, such as a lack of confidence on how to insert the condom or concerns about the noise it makes during intercourse<sup>19</sup>. Efforts to increase demand for this method must account for cultural and structural barriers to access, acceptability, and uptake.

The Hunger Project increased demand for the method in rural areas by providing information as well as FCs as part of their integrated livelihood programming. UNFPA also found that frontline health workers within communities were more successful at promoting the product than clinic-based providers. PSI has recently revitalized a team of brand promoters to work at the community level to promote the socially marketed Care FC2. Post-market research conducted under the EECO project's Whisper initiative found that male and female users liked and were willing to pay a premium price for the new product, enabling partial cost recovery.

These initiatives show that there is potential for increasing demand for female condoms if the activities are appropriately targeted and take creative steps to reach end users. However, demand generation for the female condom, as with the male condom and other health products, requires significant and sustained support.



#### **DEMAND FUNCTION CHALLENGES:**

- There has historically been inadequate investment in long-term demand creation for FCs. Organizations and campaigns supporting female condoms become discouraged by slow uptake or otherwise shift their priorities over time.
- Implementers and decision-makers lack data on the potential market for female condoms, including insights into the appropriate target audience for each type of FC product.



emand Function

**Behaviors** 

Use

#### **KEY RECOMMENDATIONS:**

- · Conduct formative research, including market research, on target audience segmentation to understand the preferences, use behaviors, values and perceptions that influence the uptake of FCs among both consumers and providers/distributors. Include research with men who may be interested in using female condoms.
- The MOH, donors, and implementing partners should take a long-term approach to building a robust market for FCs. Demand should not be a one-off campaign, but rather a sustained effort over time to integrate FCs into the broader portfolio of HIV prevention and family planning efforts. The Hunger Project's work with rural women, as well as the EECO pilot's targeting of couples in urban areas, show that there is potential to segment demand creation efforts and price points.
- The female condom market should not be compared to the male condom market in terms of demand. Female condoms face many challenges in terms of acceptance among consumers and providers/distributors. To grow the market for FCs, demand generation strategies need to be cognizant of these specific challenges and may look very different - and take more time - than campaigns for increasing acceptance of male condoms.

#### **MALAWI: FC Program Outcomes**



#### **DEFINITION:**

The goal of improving the female condom market is to increase use. Use should be tracked frequently via an agreed-upon set of indicators that incorporate key considerations for target audiences.



#### **BACKGROUND:**

There are limited data on female condom use behaviors. Many population surveys include female condoms in the "Other" category, along with emergency contraception, lactational amenorrhea, and the standard days method. Stakeholders should invest in market intelligence and dedicated research with potential users to improve market segmentation and targeting of resources.

Stakeholders rely on program data from implementing partners (e.g., on distribution) as well as routine data collection (e.g., Demographic and Health Surveys, DHS) that take place every five years to track use behaviors and inform decision-making.

<sup>18 &</sup>quot;Malawi: Education to boost popularity of female condom." July 24, 2009, PlusNews http://www.malawipolitics.com/news.php?item.185.8

<sup>19</sup> Murithi, L. et al. 2016. Understanding the Social and Cultural Context of Gender Dynamics, Sexual Relationships and Method Choice: Impact on Family Planning use in Malawi and Zambia. https://www.icrw.org/wp-content/uploads/2016/10/EECO-report-ICRW-2016.pdf

#### **A** USE BEHAVIORS CHALLENGES:

- There is little understanding of the relationship between use and need for female condoms due to lack of available data on current users, potential users, and demand/ supply functions.
- The challenges outlined in previous sections (e.g., supply, demand, policy/regulatory, leadership/coordination) contribute to low levels of FC use among consumers.



#### **KEY RECOMMENDATIONS:**

• Supplement the standard sources of information on use behaviors (e.g., DHS) with more frequent, targeted research among current users and target populations. Smaller, more focused surveys can highlight any market failures before the challenges become insurmountable.



#### **1** DEFINITION:

Equitable condom programs address specific barriers to use across target populations based on age, gender, geography, wealth quintile and risk behaviors. Equity requires a balancing of subsidy to meet the needs of these populations.



# BACKGROUND:

Equity is a fundamental argument for investing in female condoms. With sustainability as a long-term goal, stakeholders should focus on ensuring that women of all ages, geographies, education levels, and wealth quintiles have access to this important product.

# Equity

#### A EQUITY CHALLENGES:

- · Female condoms face stigma from many groups, including those procuring and distributing the product.
- Lack of data on FC use/need behaviors means that issues of equity cannot be appropriately assessed.



#### KEY RECOMMENDATIONS:

- · Stakeholders should investigate and attempt to address existing structural barriers for different population subgroups. For example, community health workers can be used to reach rural women; health providers can be trained to counsel adolescent and young women and men on female condom use; and, discordant couples' counseling can feature the female condom as an effective method for protection against HIV.
- Stakeholders at the national level should receive training on the benefits and importance of the female condom to reduce stigma among those who are responsible for decisionmaking.



#### **DEFINITION:**

Sustainable condom programs are those that have long-term, reliable and predictable sources of funding to meet all their population needs. This funding can come from the government only, for example, or from a diverse portfolio that includes commercial actors with profit incentives. Most sustainable condom programs are diverse.



## BACKGROUND:

Given the manufacturing costs as well as demand-side barriers for female condoms in Malawi, it is unlikely that the FC market will become sustainable without significant, ongoing inputs from donors and the government. Currently, female and male condoms are facing volatile investments from donors, with a high level of uncertainty about the future. While committed to including female condoms in the method mix, the national government relies heavily on donor funding to support commodity procurement. As budgets shrink, FCs are often the among the first products to be eliminated or downsized.



Sustainability

#### A SUSTAINABILITY CHALLENGES:

 Donor commitment to female condoms is unclear, resulting in challenges to quantify and forecast future programming.



#### **KEY RECOMMENDATIONS:**

• Donors should be transparent about their long-term intentions for female condom investment. Donors should work with the MOH to strategically plan for transitioning ownership and accountability for female condom programming over to the national government.

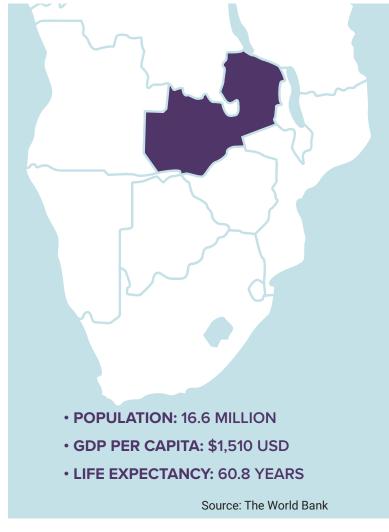
# Zambia

#### **HIV & FAMILY PLANNING CONTEXT**

Despite decreasing rates of new infections, the prevalence of HIV among adults in Zambia has remained high over the last decade, changing little from 14.3% in 2007 to 12% in 2016<sup>20,21</sup>. The epidemic is largely driven by unprotected heterosexual sex, which accounts for an estimated 90% of new infections<sup>22</sup>. There is limited data on HIV prevalence among key populations, such as female sex workers (FSW) and men who have sex with men (MSM). However, there are efforts underway to estimate the size of these populations as well as their specific social risks and needs<sup>23</sup>.

Use of modern methods of contraception is low for the southern Africa region, at 33% among all women aged 15-49. However, contraceptive use increases dramatically with women's wealth and education. Approximately 11% of sexually active, unmarried women use condoms as their main method of contraception, yet use of female condoms is low at less than 1%<sup>24</sup>.

Compared with other countries in the region, a relatively high percentage of women report that they feel women are justified in refusing sexual intercourse or asking that their husband use a condom (87.8%). This level of acceptance of women as negotiators of safer sex with their husbands offers an opportunity for the female condom to play an important role in the method mix<sup>24</sup>.





980,000 people living with HIV



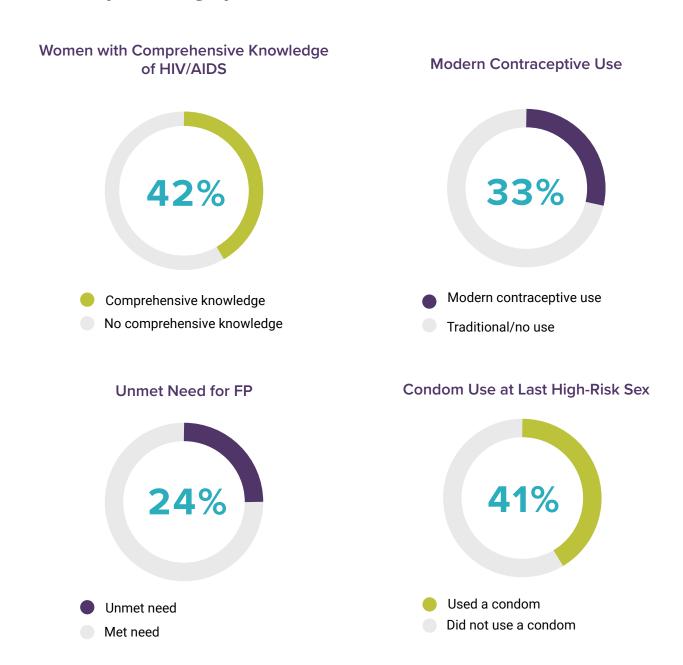
12.3% adult HIV prevalence



46,000 new HIV infections annually

Source: ZAMPHIA 2016

### **HIV & Family Planning by the Numbers - Zambia**



#### **HIV PREVALENCE BY SUBPOPULATION IN ZAMBIA**

**FSW** 56.4%

**MSM** 17% **General Population** 12.0%

12.0%

8.3%

**Young Women** 

(15-24)

Young Men (15-24) 2.0%



Sources: ZAMPHIA 2016, Zambia IBBSS 2015, PEPFAR COP 2017, Zambia DHS 2013-2014

 $<sup>^{20}</sup>$  Zambia Demographic and Health Survey 2007.  $\underline{https://dhsprogram.com/pubs/pdf/FR211/FR211[revised-05-12-2009].pdf}$ 

<sup>&</sup>lt;sup>21</sup>Zambia Population-based HIV Impact Assessment (ZAMPHIA) 2016: First Report. https://phia.icap.columbia.edu/wp-content/uploads/2017/11/FINAL-ZAMPHIA-First-Report. 11.30.17\_CK.pdf

<sup>&</sup>lt;sup>22</sup> Zambia Country Report: Monitoring the Declaration of Commitment on HIV and AIDS and the Universal Access. 2014. <a href="http://www.unaids.org/sites/default/files/country/documents/ZMB\_narrative\_report\_2014.pdf">http://www.unaids.org/sites/default/files/country/documents/ZMB\_narrative\_report\_2014.pdf</a>

<sup>&</sup>lt;sup>23</sup> Population Council. Project: Identifying Key Population in Zambia. <a href="https://www.popcouncil.org/research/identifying-key-populations-in-zambia">https://www.popcouncil.org/research/identifying-key-populations-in-zambia</a>

<sup>&</sup>lt;sup>24</sup> Zambia Demographic and Health Survey 2013-14. https://www.dhsprogram.com/pubs/pdf/FR304/FR304.pdf

#### The Female Condom in Zambia: A Brief History

#### 1995

Zambian national government launches the female condom for public sector distribution

1996

USAID | SFH/PSI launches socially marketed female condom



USAID | PRISM project distributes Care FC2 to high risk populations (total of 1.9 million female condoms distributed over life of project)

2014

UNFPA | Condomize! campaign launched to improve awareness and use of condoms among young people.

#### 2016-17

USAID | EECO project launches social marketing brand, Maximum Diva, in Lusaka

#### 2016-2021

USAID | Open Doors project focused on key populations at risk for HIV includes female condom distribution

#### State of the Female Condom Market

Society for Family Health (SFH), the network member of Population Services International (PSI) in Zambia, launched the Care FC2 as a socially marketed condom in 1996 with support from USAID. Distribution of Care continued until 2014, when the USAID-funded Partnership for Integrated Social Marketing (PRISM) project ended. While PRISM's socially marketed male condom, Maximum, was transitioned to a new platform, there are no plans for continued female condom distribution. There is no unsubsidized, commercially marketed female condom in Zambia.

The USAID-funded EECO project launched a higher price point female condom, the Maximum Diva Woman's Condom, in urban outlets in Lusaka from 2016-2018. A total of 98,408 units were distributed.

The national government distributes generic FC2 female condoms free of charge in public sector facilities. Quantification and forecasting is done annually, based on distribution data from public facilities as well as implementing partners that draw on public sector stock. Female condom procurement targets in the 2017-2021 National AIDS Strategic Framework range from 3.3 million in 2017 to 7.8 million in 2021. However, there is currently a funding gap for contraceptive commodities at the national level for 2018 and beyond, including for female condoms.



# 89.6% Zambian women

know about FCs



# <1% Zambian women currently using FCs

Source: Zambia DHS 2013-2014

## FC BRANDS 2017 \*PILOT DISTRIBUTION







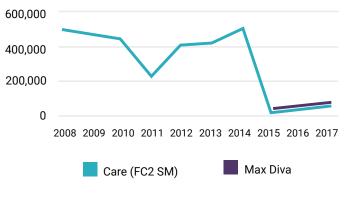
Care (SM)

FC2 (Free)

Maximum Diva\* (SM)

Photo credits: Female Health Company (FC2), WCG (Max Diva), SFH/Zambia (Care)

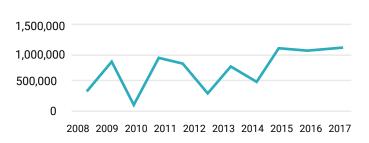
# ZAMBIA SOCIAL MARKETING FC DISTRIBUTION (2008-2017)



Data Source: PSI Data, WCG Data

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# ZAMBIA PUBLIC SECTOR FC2 DISTRIBUTION 2008-2017



Source: Zambia Ministry of Health and USAID GHSC-PSM Project

## Findings of the Total Market Assessment

The following section draws on the Mann Global Health Condom Program Pathway to assess Zambia's capacity for applying a total market approach to female condoms.

#### **ZAMBIA: FC Program Stewardship**



#### **DEFINITION:**

Government leadership and coordination are required to set the overall strategy/direction of the program, and to coordinate different market players, market facilitators, donors, and private actors.



#### **BACKGROUND:**

There is limited coordination or expertise at the national level for applying a TMA lens to condom programming. While some implementing partners, including SFH and the USAIDfunded DISCOVER-Health project, provide support for TMA initiatives, there is a very limited application of this approach presently, and a need for further training.

The National HIV/AIDS Council (NAC) is comprised of corporate, government, private sector and civil society actors. NAC's purpose is to coordinate, as well as to monitor and evaluate inputs, outputs and the impact of HIV/AIDS programs and interventions.

Several TWGs meet regularly to discuss various issues such as HIV/AIDS, adolescent health, and supply chain. Reproductive health commodities and programs are discussed, but there is no regularly dedicated discussion of female condom needs beyond reporting their stock.

Zambia's previous National Comprehensive Condom Programming Strategy expired in 2014 and has yet to be replaced. However, the National AIDS Strategic Framework (2017-2021) lays out a plan to adopt UNFPA's 10-step approach for Comprehensive Condom Programming, with one of the strategies listed as a total market approach to comprehensive condom programming. However, there is no further mention in the document of how a TMA strategy might be used to meet this objective.

#### LEADERSHIP & COORDINATION CHALLENGES:

- · Interviews with stakeholders suggested that there is a limited application of TMA concepts at the national level, and there is no recognized resource in-country for improving understanding nor is there a recognized champion for FCs.
- · Donor funding for FCs has declined and is volatile, resulting in decreased access and availability.

Coordination

Leadership &

**Program Analytics** 

#### **IF** KEY RECOMMENDATIONS:

- The NAC should assign a dedicated market facilitator to provide support for developing the TMA strategy under the NASF (2017-2021), ensuring that female condoms are included in the plan.
- Advocates can leverage the adoption of UNFPA's 10-step Approach to Comprehensive Condom Programming in the 2017-2021 NASF to advocate for increased attention on female condoms. The NASF document contains little to no mention of female condoms. yet they are an important facet of attaining CCP.
- The MOH, NGO partners and donors should continue to build technical capacity for TMA as part of the NASF 2017-2021 strategy.

#### **1** DEFINITION:

Total market data are necessary to analyze condoms needs and condom market performance across all players and functions, in order to adjust and plan for interventions.



## **BACKGROUND:**

#### **Program Data**

The national government has very limited insight into public sector female condom markets. While distribution is recorded at Central Medical Stores, there is limited demographic information about who is using public sector FCs, and how the FC fits within their contraceptive method choice.

Program experiences from social marketing organizations are shared at TWGs to inform the national government and other stakeholders. However, there is no systematic method of recording and disseminating market data and program experiences with FCs.

#### Population/Demographic Data

There is a need for frequent and robust population-level data collection to understand which segments could most benefit from increased availability of female condoms, as well as the price points that are appropriate for each segment. With funding from PEPFAR, the Population Council and a team of partners conducted research from 2011-2017 to estimate the population size and risk behaviors of key vulnerable populations (KVP) at risk such as FSW and MSM<sup>23</sup>. These new data are an important step in understanding the potential market for FCs. Zambia's Demographic and Health Survey is scheduled for completion in 2018, which will provide important demographic updates on HIV prevalence, condom use behaviors, and equity issues.



#### **PROGRAM ANALYTICS CHALLENGES:**

- Stakeholders have very few data sources to assess the market for FCs.
- · Social marketing organizations and NGOs report on FC activities in an ad hoc manner that may not be systematically documented to build the evidence base of successful strategies.



#### **KEY RECOMMENDATIONS:**

- · Donors and other stakeholders should invest in market and consumer research to better understand the potential market for FCs, including the preferences and behaviors of current as well as potential users.
- Program experiences from social marketers and NGOs distributing FCs and working with target populations should be systematically documented at the national level to assess successes and challenges.



#### **1** DEFINITION:

Coordinated and adequate financing is required for all critical aspects of condom programming, with appropriate use of subsidy to address gaps in the condom program.



#### BACKGROUND:

The MOH is highly reliant on donors such as UNFPA, USAID, and the Global Fund for condom procurement. The national government presents their quantification of RH needs and donors select which commodities they are able to fund, with cooperating partners filling any gaps that may arise. Recent years have seen volatile investments from donor agencies, with decreasing support overall for condoms. Female condom procurement is included in the reproductive health budget, but there is no dedicated funding for demand generation or other programming to support female condom education or awareness-building.

With the close of SFH's PRISM project in 2014 and the EECO project's support for Maximum Diva ending in 2018, there are currently no donor-funded social marketing projects supporting female condoms.



#### **A** FINANCING CHALLENGES:

- Donor investments in female condoms are deteriorating, yet the MOH has not transitioned ownership/accountability for procurement of FCs over to the national government to fill the gap.
- As of September 2018, there will be no donor-supported, socially marketed female condom.



#### KEY RECOMMENDATIONS:

- There is a need to increase funding for FC commodities and demand generation, both in the public sector and through social marketing.
- Donors should be transparent about their intended future investments in female condoms and should work closely with the MOH to plan for transition/ownership of any funding needs to the national government, as appropriate.



#### **DEFINITION:**

Enabling environment factors should support all market players and target populations, while ensuring compliance with national standards.



#### **BACKGROUND:**

#### **Policy considerations:**

Key populations face legal barriers in Zambia that may limit their access to health services. Same sex intercourse is illegal in Zambia. While sex work is decriminalized, commercial sex workers report abusive and inconsistent law enforcement by police<sup>25</sup>. Young people face bias and stigma when it comes to accessing condoms. While the NAC supports sexual health knowledge and behavior change, it does not publicly endorse provision of condoms in school.

#### REGULATORY & QUALITY ASSURANCE

The Zambian Medicines Regulatory Authority (ZAMRA) is responsible for the registration of pharmaceutical products and medical devices. ZAMRA issued new Guidance for the Preparation and Submission of Dossiers in 2016 for registration of male and female condoms. In addition, Zambia's National Drug Quality Control Laboratory (NDQCL) is scheduled for completion in December 2018, when it will be used for quality testing of pharmaceutical and medical devices. Female condoms are listed in Zambia's Essential Medicines List.



#### POLICY & REGULATION CHALLENGES:

• Despite some positive legal provisions that protect marginalized populations, a high level of stigma exists that discriminates against FSW, sexually active youth, MSM, and other key populations.



#### **KEY RECOMMENDATIONS:**

- Stakeholders should continue to advocate for policy changes that protect the rights of marginalized populations to access health services and reproductive health/HIV prevention technologies such as female condoms.
- MOH should scale up training and safe spaces for health workers to provide services to sex workers, MSM and youth to freely access condoms without discrimination<sup>26</sup>.

## **ZAMBIA: FC Program Development**



#### **1** DEFINITION:

"Supply" refers to a comprehensive approach looking at the entire value chain in the public sector and across private channels, including quantification, forecasting, procurement efficiencies, supply chain management and pricing structures.



**Supply Function** 

#### **BACKGROUND:**

#### **Public Sector**

Public sector FC supply is tracked via the national electronic Logistics Management Information System (eLMIS) deployed nationwide in 2015, where commodity needs are communicated from district level to the Central Medical Stores using a "pull system" from facility-level demand. However, challenges remain regarding timely reporting of stock levels, which can lead to condom stock-outs. In the public sector, female condoms are made available at a variety of locations, including health posts, clinics, and hospitals, as well as non-health outlets, like border offices. Yet, a 2014 assessment by the National AIDS Council found that low availability was a factor associated with low use<sup>27</sup>.

National supply forecasts are driven by consumption data. Due to low demand, female condom stock moves slowly. This results in small quantities of FCs ordered at the facility level and frequent stock-outs of the product, which contribute to a cycle of low demand and low use. At the time of this report, the MOH was forecasting supply needs for the next three years. Female condom procurement targets in the National AIDS Strategic Framework range from 3.3 million in 2017 to 7.8 million in 2021.

#### Social Marketing

The USAID-funded Partnership for Integrated Social Marketing (PRISM) project, operating between 2009 and 2014, promoted socially marketed female condoms among key populations such as sex workers, miners, and truckers at venues like hair salons, barbershops, bars, brothels, and nightclubs. Unlike the socially marketed male condom brand developed under the PRISM project and then transitioned to the USAID-funded DISCOVER-Health project, there are no plans in place to transition the Care FC2 to a new platform. With the close of the PRISM project in 2014 and the EECO project's support for Maximum Diva ending in 2018, there are currently no donor-funded social marketing projects supporting female condoms. There is currently no commercial sector female condom available.

<sup>&</sup>lt;sup>25</sup> Sexuality, Poverty and Law Programme. http://spl.ids.ac.uk/sexworklaw/countries

<sup>26</sup> National HIV/AIDS/STI/TB Council. 2017. Zambia National HIV Prevention Coalition Roadmap: Results of the Stocktaking Exercise. https://hivpreventioncoalition.unaids.org/ wp-content/uploads/2018/02/Zambia-FINAL-Stocktaking-Exercise-report-3-Oct-2017.pdf

<sup>&</sup>lt;sup>27</sup> Phiri, C. April 21, 2014. Low Female Condom Use in Zambia - Survey. https://zambiareports.com/2014/04/21/low-female-condom-use-zambia-survey/



#### **SUPPLY FUNCTION CHALLENGES:**

- Limited demand generation results in slow stock movement so that distributors of public sector or social marketing FCs are disincentivized to procure more stock.
- Supply may not be available or accessible to potential users. A 2015 study among FSWs found that only 59% of those surveyed reported that they knew of a source for FCs<sup>28</sup>.



#### **KEY RECOMMENDATIONS:**

- MOH and donor agencies should conduct a rapid assessment of the female condom market before the end of 2018. Zambia's FC market is poised for a significant downturn in terms of brand mix and availability. With the end of FC inclusion in social marketing programs in 2018, the only FCs available will be through the public sector.
- · Donors and implementing agencies should leverage existing platforms to include FCs as part of their HIV/FP offerings. For example, the Open Doors project led by FHI360 has gained access to key populations such as FSW<sup>26</sup>. Integrating a strong FC supply chain into this program could be an important opportunity.
- Supply must be tightly linked with demand generation efforts at the community level in order to keep stock moving through the system. This should include market research to determine appropriate/accessible outlets for female condom distribution.
- The transition to an eLMIS platform offers an opportunity to monitor FC distribution trends in real-time. The national government, or the appointed FC market facilitator, should take advantage of this new system to monitor regions/facilities where stock is moving more quickly and assess what the success factors are at those locations.



#### **DEFINITION:**

Increasing and sustaining FC use requires a dedicated focus on demand generation within priority target populations.



#### **BACKGROUND:**

Fewer than 1% of Zambian women currently use FCs as their method of choice<sup>24</sup>; however, several studies in the region show that education and awareness-raising activities are critical to increasing demand for this method<sup>8,18</sup>. There is also low awareness of FCs compared to other methods<sup>24</sup>. Formative research under the EECO project with potential female condom users highlighted significant cultural barriers to use of female condoms such as stigma against the product, women's lack of negotiating power in sexual relationships, especially for younger women with older partners, as well as lack of confidence in how to use the method19.

Demand generation for a slow-growing market such as the FC market requires significant and sustained support. There is currently no dedicated initiative to increase demand for female condoms in Zambia. As of October 2018, there will be no programmatic demand generation for socially marketed FCs.

Given the current low demand for female condoms and the lack of planned promotion or educational activities, Zambia is at risk of losing any gains that it has made in increasing use of this product in recent years.



#### **DEMAND FUNCTION CHALLENGES:**

- There has historically been inadequate investment in long-term demand creation for FCs. As a result, FCs face stigma throughout all levels of the supply chain - from decisionmakers at the top to community-level consumers.
- · Social marketing organizations are known for raising awareness of condoms (female and male) and using creative techniques to identify and reach target audiences. With no socially marketed FC, there is a risk that large segments of the population will be left without access to or knowledge of FCs.
- Implementers and decision-makers lack data on the potential market for female condoms, including insights into the appropriate target audience for each type of FC product.

<sup>&</sup>lt;sup>28</sup> Kasongo, W. et al. 2016. Integrated Biological and Behavioural Surveillance Survey among Female Sex Workers in Zambia, 2015. http://www.nac.org.zm/sites/default/files/ publications/IBBS%202015%20Final%20Report%204%20March%202016.pdf



#### KEY RECOMMENDATIONS:

- The MOH, donors, and implementing partners should take a long-term approach to building a robust market for FCs. Demand should not be a one-off campaign, but rather a sustained effort over time to integrate FCs into the broader portfolio of HIV prevention and family planning efforts.
- As noted in the Malawi section above, the female condom market should not be compared to the male condom market in terms of demand. Female condoms face many challenges in terms of acceptance among consumers and providers/distributors. To grow the market for FCs, demand generation strategies need to be cognizant of these specific challenges and may look very different from - and take more time than - campaigns for increasing acceptance of male condoms.

### **ZAMBIA: FC Program Outcomes**



#### **DEFINITION:**

The goal of improving the female condom market is to increase use. Use should be tracked frequently via an agreed-upon set of indicators that incorporate key considerations for target audiences.



#### **BACKGROUND:**

There are limited data on female condom use behaviors. However, the Population Council's research on vulnerable populations is an important step in identifying and quantifying need among key target groups. Potential market failures at a more general level are assessed only every five years in the Demographic and Health Surveys. For example, the 2013-14 DHS found that while HIV testing went up among adolescents, reported condom use and teenage pregnancy rates did not change<sup>26</sup>. This discovery reinvigorated efforts at the national level to promote and increase comprehensive adolescent sexual health services, but it may be too little too late.

#### **USE BEHAVIORS CHALLENGES:**

- · Population-level data collection is too infrequent to detect urgent needs among target audiences.
- There is little understanding of the relationship between use and need for female condoms due to lack of available data on current users, potential users, and demand/ supply functions.
- · The challenges outlined in previous sections (e.g., supply, demand, policy/regulatory, leadership/coordination) contribute to low levels of FC use among consumers.



**Behaviors** 

Use

Equity

#### **KEY RECOMMENDATIONS:**

· Supplement the standard sources of information on use behaviors (e.g., DHS) with more frequent, targeted research among current users and target populations. Smaller, more focused surveys can highlight any market failures before the challenges become insurmountable.



#### **1** DEFINITION:

Equitable condom programs address specific barriers to use across target populations based on age, gender, geography, wealth quintile and risk behaviors. Equity requires a balancing of subsidy to meet the needs of these populations.



## BACKGROUND:

While there are limited data on female condom users, male condom data show there are inequalities in terms of use by wealth quintile as well as geography, with rates of use increasing among wealthier and urban men and women. A 2015 IBBSS study among FSW showed that a high percentage of FSW knew of female condoms (94.1%), but only 14% had ever used one<sup>28</sup>.

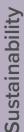
There are many "hotspots" in Zambia in terms of HIV prevalence. Particularly in border towns, where commercial sex work is more prevalent, rates of HIV among sex workers can be as high as 73% compared to 12% among the general population<sup>28,29</sup>. Removing barriers to female condom access in populations such as these is a critical equity issue.



#### **A** EQUITY CHALLENGES:

- Lack of data on FC use/need behaviors means that issues of equity cannot be appropriately assessed. The market may be failing key groups that are not captured in current data collection.
- FCs face a high level of stigma, including from those procuring and distributing the product. Addressing stigma against FCs will help to ensure that equitable FC programs are a top priority throughout all levels of the supply chain.

<sup>&</sup>lt;sup>29</sup> Jain, S. et al. 2011. Risky Business Made Safer - Corridors of Hope: An HIV Prevention Program in Zambian Border and Transit Towns. https://aidsfree.usaid.gov/sites/default files/aidstar-one casestudy gender coh zambia.pdf



#### **KEY RECOMMENDATIONS:**

- · Stakeholders should investigate and attempt to address existing structural barriers for different population subgroups. For example, community health workers can be used to reach rural women; health providers can be trained to counsel adolescent and young women and men on female condom use; and, discordant couples' counseling can feature the female condom as an effective method for protection against HIV.
- Stakeholders at the national level should receive training on the benefits and importance of the female condom to reduce stigma among those who are responsible for decisionmaking.

#### **DEFINITION:**

Sustainable condom programs are those that have long-term, reliable and predictable sources of funding to meet all their population needs. This funding can come from the government only, for example, or from a diverse portfolio that includes commercial actors with profit incentives. Most sustainable condom programs are diverse.



#### **BACKGROUND:**

Given the cost of goods as well as the significant cultural and structural barriers to increasing the market for female condoms, it is unlikely that female condoms will be sustainable through out-of-pocket payments in the near-term without significant investment in demand creation. However, in consideration of the benefits of increasing the method mix for women, arguments about the sustainability of the method may be less relevant than the issues outlined above of ensuring equitable access for those who need the product.

In Zambia in particular, there is a need to diversify the market to include options outside of free distribution. By prioritizing demand generation among population segments willing to pay for a branded product, social marketing has the potential to contribute to the overall growth and sustainability of FC markets.



#### A SUSTAINABILITY CHALLENGES:

· Donor commitments to female condoms is unclear; this results in challenges to quantify and forecast future programming.



Sustainability

#### **KEY RECOMMENDATIONS:**

- Donors should be transparent about their long-term intentions for female condom investment. Donors should work with the MOH to strategically plan for transitioning ownership and accountability for female condom programming over to the national government.
- The experience of the EECO program selling Maximum Diva in urban Lusaka demonstrated that there is a willingness to pay for female condoms among certain population segments. Some donor subsidy was still required even to reach middle-income Zambians. A segmented approach with a diversity of brands and price ranges should be taken to test whether any FC could achieve full cost recovery, enabling better targeting of donor subsidies and potentially supporting cross-subsidization of a generic product.

#### **Conclusions**

Female condoms play an important role in family planning and HIV prevention efforts as the only woman-initiated triple protection method currently available. The following "Dos and Don'ts" from Zambia and Malawi offer potential solutions for addressing market failures and increasing demand for this product.

**DO assign a female condom champion.** In the case of Malawi, the experience from 2004 to 2010 shows the potential for growing the FC market when there is coordinated advocacy and investment. In Zambia, the lack of a dedicated champion means that female condoms are likely to fall out of the HIV prevention/FP agenda in the near future. Assigning a female condom champion is an important first step for giving female condoms the attention they deserve.

**DON'T assume that all female condom users are the same.** Stakeholders should invest in market research to segment the market and allocate resources more efficiently. The EECO project in both countries, along with the many years of social marketing of FCs, shows that there is a segment of the population that is willing to pay partial cost recovery prices for female condoms. Take advantage of this opportunity to redistribute subsidies to those most in need.

**DO invest in demand generation, monitoring and evaluation.** Demand generation is a critical component of growing the female condom market, and should not be addressed with short-term, one-off interventions. However, stakeholders do not have a firm understanding of which interventions are the most effective. By investing in better monitoring and evaluation of demand generation efforts, stakeholders will be better able to determine which types of activities deserve attention.

**DO leverage existing platforms for family planning and HIV prevention.** Rather than creating stand-alone or vertical programming, stakeholders should look for creative ways to leverage existing activities to include female condoms as part of their offerings. UNFPA's partnership with The Hunger Project in Malawi demonstrates the potential impact of embedding female condoms in an integrated livelihood initiative. In Zambia, several large-scale family planning, HIV, and livelihood programs have the potential to incorporate female condom activities.

DON'T assume that male and female condoms are the same. Female condoms are not the same as male condoms, and should not be compared head-to-head in terms of market volume, demand generation strategy, or supply forecasting, as the market for male condoms is much larger and moves more quickly from warehouses to consumers. However, a best practice in Malawi has been to use the term "male and female" wherever the word "condoms" is used in national strategy documents. Acknowledging the role of female condoms in this way ensures that the product category is part of the national agenda.

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#### References

Centers for Disease Control and Prevention (CDC). 2016. Condom Effectiveness – Female Condom Use. <a href="https://www.cdc.gov/condomeffectiveness/Female-condom-use.html">https://www.cdc.gov/condomeffectiveness/Female-condom-use.html</a>

Central Statistical Office (CSO), Ministry of Health (MOH), Tropical Diseases Research Centre (TDRC), University of Zambia, and Macro International Inc. 2009. Zambia Demographic and Health Survey 2007. Calverton, Maryland, USA: CSO and Macro International Inc. <a href="https://dhsprogram.com/pubs/pdf/FR211/FR211[revised-05-12-2009].pdf">https://dhsprogram.com/pubs/pdf/FR211/FR211[revised-05-12-2009].pdf</a>

Central Statistical Office (CSO) [Zambia], Ministry of Health (MOH) [Zambia], and ICF International. 2014. Zambia Demographic and Health Survey 2013-14. Rockville, Maryland, USA: Central Statistical Office, Ministry of Health, and ICF International. <a href="https://www.dhsprogram.com/pubs/pdf/FR304/FR304.pdf">https://www.dhsprogram.com/pubs/pdf/FR304/FR304.pdf</a>

Cisek, C. & Khomani, F. 2018. Condom Distribution and Reporting Assessment: Strengthening Linkages at National, District, Facility, and Community Levels in Malawi. Washington, DC: Palladium, Health Policy Plus. <a href="http://www.http://www.healthpolicyplus.com/ns/pubs/8201-8356\_CondomDistributionandReportingAssessment.pdf">http://www.htt

Frances-Chizororo, M. & Natshalaga, N.R. 2003. The female condom: acceptability and perception among rural women in Zimbabwe. *African Journal of Reproductive Health*, 7(3): 101-16. <a href="https://www.ncbi.nlm.nih.gov/pubmed/15055153">https://www.ncbi.nlm.nih.gov/pubmed/15055153</a>

Guttmacher Institute. 2017. Adding It Up: Investing in Contraception and Maternal and Newborn Health, 2017. <a href="https://www.guttmacher.org/fact-sheet/adding-it-up-contraception-mnh-2017">https://www.guttmacher.org/fact-sheet/adding-it-up-contraception-mnh-2017</a>

Kasongo, W., Tembo, M., Mwakazanga, D., Kamanga, J., Mwape, F., & Chelu, L. 2016. Integrated Biological and Behavioural Surveillance Survey (IBBSS) among Female Sex Workers in Zambia, 2015. <a href="http://www.nac.org.zm/sites/default/files/publications/IBBS%202015%20Final%20Report%204%20March%202016.pdf">http://www.nac.org.zm/sites/default/files/publications/IBBS%202015%20Final%20Report%204%20March%202016.pdf</a>

Malawi: Education to boost popularity of female condom. July 24, 2009, PlusNews. <a href="http://www.irinnews.org/report/85429/malawi-education-boost-popularity-female-condom">http://www.irinnews.org/report/85429/malawi-education-boost-popularity-female-condom</a>

Malawi National AIDS Commission. 2015. Malawi AIDS Response Progress Report. <a href="http://www.unaids.org/sites/default/files/country/documents/MWI\_narrative\_report\_2015.pdf">http://www.unaids.org/sites/default/files/country/documents/MWI\_narrative\_report\_2015.pdf</a>

Malawi Population-based HIV Impact Assessment (MPHIA). 2016. Summary Sheet: Preliminary Findings. <a href="https://www.hiv.html.neuron.neuron">https://www.hiv.html.neuron

Mann Global Health. 2017. The Condom Program Pathway. <a href="http://mannglobalhealth.com/wp-content/uploads/2017/11/MGH\_Condom-Landscaping-Report\_Final\_091117.pdf">http://mannglobalhealth.com/wp-content/uploads/2017/11/MGH\_Condom-Landscaping-Report\_Final\_091117.pdf</a>

Marseille, E., Kahn, J.G., Billinghurt, K., & Saba, J. 2001. Cost-effectiveness of the female condom in preventing HIV and STDs in commercial sex workers in rural South Africa. Social Science & Medicine, 52 (1): 135-48. <a href="https://www.ncbi.nlm.nih.gov/pubmed/11144911">https://www.ncbi.nlm.nih.gov/pubmed/11144911</a>

Miller, N., Mann, C., Jackson, A., & Harris, D. 2018. Expanding Effective Contraceptive Options: Lessons Learned from the Woman's Condom Introduction in Zambia and Malawi. <a href="http://www.wcgcares.org/wp-content/uploads/2018/10/WC-Case-Study-3\_FINAL-digital.pdf">http://www.wcgcares.org/wp-content/uploads/2018/10/WC-Case-Study-3\_FINAL-digital.pdf</a>

Ministry of Health, Malawi. 2017. Malawi National Condom Strategy, 2015-2020. <a href="http://www.healthpolicyplus.com/ns/pubs/7184-7325\_MalawiNationalCondomStrategyJuly.pdf">http://www.healthpolicyplus.com/ns/pubs/7184-7325\_MalawiNationalCondomStrategyJuly.pdf</a>

Ministry of Health, Malawi. 2017. Malawi Population-based HIV Impact Assessment (MPHIA) 2015-16: First Report. <a href="https://phia.icap.columbia.edu/wp-content/uploads/2017/11/Final-MPHIA-First-Report\_11.15.17.pdf">https://phia.icap.columbia.edu/wp-content/uploads/2017/11/Final-MPHIA-First-Report\_11.15.17.pdf</a>

Ministry of Health, Zambia. 2017. Zambia Population-based HIV Impact Assessment (ZAMPHIA) 2016: First Report. <a href="https://phia.icap.columbia.edu/wp-content/uploads/2017/11/FINAL-ZAMPHIA-First-Report\_11.30.17\_CK.pdf">https://phia.icap.columbia.edu/wp-content/uploads/2017/11/FINAL-ZAMPHIA-First-Report\_11.30.17\_CK.pdf</a>

Murithi, L., Hinson, L., Dhillon, P., Steinhaus, M., Santillán, D., & Petroni, S. 2016. Understanding the Cultural Context and Gender Dynamics, Sexual Relationships and Method Choice: Impact of Family Planning Use in Malawi and Zambia. https://www.icrw.org/wp-content/uploads/2016/10/EECO-report-ICRW-2016.pdf

National HIV/AIDS/STI/TB Council. 2014. Zambia Country Report: Monitoring the Declaration of Commitment on HIV and AIDS and the Universal Access. <a href="http://www.unaids.org/sites/default/files/country/documents/ZMB\_narrative\_report\_2014.pdf">http://www.unaids.org/sites/default/files/country/documents/ZMB\_narrative\_report\_2014.pdf</a>

National HIV/AIDS/STI/TB Council. 2017. Zambia National HIV Prevention Coalition Roadmap: Results of the Stocktaking Exercise. <a href="https://hivpreventioncoalition.unaids.org/wp-content/uploads/2018/02/Zambia-FINAL-Stocktaking-Exercise-report-3-Oct-2017.pdf">https://hivpreventioncoalition.unaids.org/wp-content/uploads/2018/02/Zambia-FINAL-Stocktaking-Exercise-report-3-Oct-2017.pdf</a>

National Statistical Office (NSO) [Malawi], and ORC Macro. 2005. Malawi Demographic and Health Survey 2004. Calverton, Maryland: NSO and ORC Macro. https://dhsprogram.com/pubs/pdf/FR175/FR-175-MW04.pdf

National Statistical Office (NSO) [Malawi] and ICF. 2017. Malawi Demographic and Health Survey 2015-16. Zomba, Malawi, and Rockville, Maryland, USA. NSO and ICF. <a href="https://dhsprogram.com/pubs/pdf/FR319/FR319.pdf">https://dhsprogram.com/pubs/pdf/FR319/FR319.pdf</a>

Phiri, C. April 21, 2014. Low Female Condom Use in Zambia - Survey. <a href="https://zambiareports.com/2014/04/21/low-female-condom-use-zambia-survey/">https://zambiareports.com/2014/04/21/low-female-condom-use-zambia-survey/</a>

Population Council. Project: Identifying Key Population in Zambia. <a href="https://www.popcouncil.org/research/identifying-key-populations-in-zambia">https://www.popcouncil.org/research/identifying-key-populations-in-zambia</a>

Sexuality, Poverty and Law Programme. http://spl.ids.ac.uk/sexworklaw/countries

Sustaining Health Outcomes through the Private Section (SHOPS) Plus. 2016. Total Market Approach. <a href="https://www.shopsplusproject.org/tma">https://www.shopsplusproject.org/tma</a>

UN Women. 2018. Facts and Figures: HIV and AIDS. <a href="http://www.unwomen.org/en/what-we-do/hiv-and-aids/facts-and-figures">http://www.unwomen.org/en/what-we-do/hiv-and-aids/facts-and-figures</a>

Vijayakumar, G., Mabude, Z., Smit, J., Beksinska, M., & Lurie, M. 2006. A review of female-condom effectiveness: patterns of use and impact on protected sex acts and STI incidence. *International Journal of STD & AIDS, 17*(10): 652-9. <a href="https://www.ncbi.nlm.nih.gov/pubmed/17059633">https://www.ncbi.nlm.nih.gov/pubmed/17059633</a>







